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The Effects of Mentoring Standards as a Policy Instrument on the Mentor-Mentee Relationship of Beginning Math and Science Teachers in High-Poverty Middle Schools

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The Effects of Mentoring Standards as a Policy Instrument on the Mentor-Mentee Relationship of Beginning Math and Science Teachers in High-Poverty Middle Schools

by

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Dedication

To my parents: Dr. James H. Dietz and Charlotte E. Dietz who encouraged all of their children to be life-long learners but above all to be “gracious” in life

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The Effects of Mentoring Standards as a Policy Instrument on the Mentor-Mentee Relationship of Beginning Math and Science Teachers in High Poverty Middle Schools

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Induction and mentoring programs are often portrayed as commonsense policy solutions to lower teacher attrition, build beginning teacher capability and ultimately, raise student achievement. Mentoring standards however, have rarely been examined to see how their interpretation and implementation influence the relationship of mentor-mentee pairs in local contexts under a state voluntary induction and mentoring program.

In this multi-cased qualitative study, I interviewed nine mentor-mentee pairs and conducted separate mentor and mentee focus groups as well as observing the mentor and mentee interact during an observational cycle in seven high poverty middle schools under Texas' Beginning Teacher Induction and Mentoring (BTIM) program. I also performed a content analysis of mentor training and support materials.

Using Cohen and Moffitt's policy implementation framework I found that due to the lack of specificity and formalness of mentoring standards in BTIM-specific and non-specific documents, and the spottiness of mentor initial training, most mentors and mentees needed to rely on their capabilities and dispositions to define their roles.

Consequently, it seemed that in the eyes of the mentors and mentees their relationship was informal; this was reflected in the roles that they assumed.

Based on the study results, I recommend that mentoring standards for the mentor and mentee be more specific and formally defined. Indeed, there appears to be a need to formally conceptualize mentoring from its policy aims to its policy instruments within mentoring policy.

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CHAPTER 1: INTRODUCTION

In today's educational context of high stakes testing and the re-segregation of many of America's urban schools, the retention of high quality beginning teachers especially in urban and rural school districts has come to the forefront of public school policy (Olebe, 2001). Indeed, there seems to have been a policy shift from an emphasis solely on teacher recruitment to an additional focus: retaining novice teachers by expanding their knowledge base through professional development, and induction and mentoring programs (Achinstein & Athanases, 2006a; Carver & Feiman-Nemser, 2009; The Dana Center, 2002; Olebe, 2001). Federal policies such as No Child Left Behind of 2001 and Title II of Higher Education Act of 2008 appear to have influenced not only who gets into teaching but also who stays in the field, and how schools, teachers and teacher preparation programs are held accountable for these outcomes. The policy aim of these educational policies appears to be the same: increase teacher quality (Cohen & Moffitt, 2009; Youngs, 2007).

In this chapter I examine how standards as a policy instrument are proposed as a means to increase teacher quality during the standard-based movement as well as the rationale for the creation of induction and mentoring programs and their various forms is undertaken. In particular, I look at some of the challenges for creating and supporting quality induction and mentor programs These include: the proliferation of teacher preparation entities and their impact, the limitations of current induction and mentoring studies, the content-specific needs for the mentor and mentee, the lack of agreement on

standards for mentoring and induction programs, and the under-studied contexts of high poverty middle schools.

For purposes of this study, mentoring will refer to "… a developmental relationship that is embedded within the career context" between an experienced teacher, the mentor and an individual, the mentee during her first five years of teaching (Ragins & Kram, 2007, p. 5) Mentoring serves two primary functions: job-related and "psycho-social". The "career-related" function refers to the mentor helping the beginning teacher to learn the "behaviors" needed to "learn the ropes" of teaching and "…prepare them for the hierarchical advancement with their organizations"; for this function, the mentor "coaches" the mentee and "sponsors their advancement" within the educational sphere. The psycho-social function refers to the mentor concentrating on building the mentor-mentee relationship by "… enhanc(ing) the protégé's professional and personal growth, identity, self-worth and self-efficacy". In this case, the mentor will offer "…counseling, friendship and role modeling" (Ragins & Kram, 2007, p. 5)

In the K-12 high stakes accountability world, "standards" are usually defined as what the student (and hence the teacher) needs to know and be able to do (See O'Day & Smith, 1993; Swanson & Stevenson, 2002; Wise & Leibbrand, 2000). In a similar vein, mentoring standards[1] will refer to what the mentor and mentee need to know and do within the mentor-mentee relationship; they carry the job-related functions as well as the psycho-social functions needed to develop the mentor's and mentee's capabilities in the

[1] I coined this term for this study but it is grounded in NTC's (2011) the structural and instructional induction program standards

classroom and within the mentor-mentee relationship. In other words, mentoring standards are used as both a policy tool to change practice as well as to increase the capability of the mentor and mentee.

Using the New Teacher Center's (NTC, 2011) program standards nomenclature, mentoring standards belong to "structural standards" since they define the mentor role and responsibilities and "instructional standards" since part of the focus is on the mentee developing"… the knowledge, capabilities and dispositions that are critical for new teachers…" (p. 4). However, there is also an additional function of mentoring standards- what is the mentee, under the guidance of the mentor supposed to do within this mentoring relationship. Moreover, mentoring standards will be reflected in the mentoring instruments or tools used to support and carry out the mentor and mentee roles; these would include for instance, observational and/or conversational tools.

Teacher Quality and Policy Instruments

Increasing teaching quality is an ambiguous and ambitious goal (Cohen & Hill, 2001; Cohen & Moffitt, 2009). It is ambiguous since there are no common shared attributes on what constitutes an "effective" teacher in the research (e.g., Boyd, Goldhaber, Lankford & Wyckoff, 2007; Darling-Hammond & Sykes, 2003; Goldhaber & Brewer, 2000; Hanushek, Kain, O'Brien & Rivkin, 2005; Clotfelter, Ladd & Vigdor, 2006) and ambitious since there is no national agreed upon language and vocabulary that delineate what a teacher and student should be able to do (Cohen & Moffitt, 2009). Standards are one alternative policy instrument (McDonald & Elmore, 1987; Spillane, 2004) to help mitigate the ambiguity problem (Cohen & Hill, 2001; Cohen & Moffitt,

2009) by reforming teacher education and stipulating what K-12 teachers and students should know and be able to do.

Policy instruments however, can have varying degrees of strength and saliency; these two elements can influence how policy reform is understood by the implementers which in turn affect the success of the policy: Strong and salient instruments not only inform the practitioner about what and how to do something but also give an incentive to comply (Cohen & Hill, 2001; Cohen & Moffitt, 2009). Saliency, in this regard refers to standards that are clear and easy to follow and strong in the sense that they are tied to accountability measures. However, standards by nature tend to be global in their aims and purpose, allowing for them to be adaptable to a multitude of contexts (Cohen & Moffitt, 2009). This adaptability has a drawback: a lack of specificity creates ambiguity unless the policy implementer has the capacity and a supportive environment to navigate this ambiguity (Cohen & Moffitt, 2009). This lack of specificity can be unsettling for beginning teachers as they try to navigate the accountability environment while simultaneously trying to learn to teach (Kauffman, Johnson, Kardos, Liu & Peske, 2002). Consequently, some researcher have argued that within state induction programs there must be a balance between support, specificity and autonomy: too much policy specificity, as mandated by the state can prevent districts from the ability to adapt the program to their local district but too little guidance means the goals or aims of the program are difficult to operationalize and consequently, are difficult to assess at the district level (Bartlett & Johnson, 2009).

Moreover, policy instruments do not work in isolation but in conjunction with three other resources: Aims of the policy, capability or capacity and the environment (Cohen & Moffitt, 2009). Capability is what the implementer and others "bring to policy." Capabilities include the skills, dispositions, values, interests and knowledge that an individual brings to the policy which are influenced by the organization and the environment that in turn shape "the interests and values that inform policy" (p. 37). Indeed, the interactions among people, policies and places affect the success or failure of a policy (Honig, 2006; Spillane, 2004). Capacity has been a long concern for policymakers, researchers and implementers of educational policy (Cohen & Ball, 1999; Elmore, 2004); these include institutional capacity (Elmore, 2004; Mintrop,2004) and teacher capacity for both the beginning (e.g., Feiman-Nemser, 2001a; Kauffman, Johnson, Kardos, Liu & Peske, 2002) and experienced teacher (e.g., as they learn to mentor, Feiman-Nemser, 2001b; Stanulis & Floden, 2009) as well as "instructional capacity" (Cohen & Ball, 1999; Mintrop, 2004).

In addition to these resources, different policy instruments also work together (Cohen & Hill, 2001). For instance, effective reform-based standards tend to be those that work in tandem with targeted professional development "grounded" in the new curriculum in which the teacher experiences the curriculum both as a learner and as a teacher (Cohen & Hill, 2001). In other words, teachers need opportunities to learn the "instruments of practice" (Cohen & Hill, 2001). This teacher learning appears to be one of the keys to linking policy with practice. However, teacher learning is usually not the focus of reform-based policy; rather, the aim is to increase student knowledge (Cohen &

Hill, 2001). But therein lies the rub: it appears that to achieve the latter means to accommodate the former goal (Cohen & Hill, 2001; Spillane, 2004).

Standards as a policy instrument did not emerge on their own but were part of a greater proposed systemic educational reform movement (O'Day & Smith, 1993) that began in the 1980s as a way to hold schools and teachers accountable to student outcomes. Although part of this movement was to change how American educational system was governed, it manifested itself only into a standards-based movement in which standards were portrayed as incentives for changing the ways in which schools and teachers did their business (Polikoff, Porter & Smithson, 2011). This movement is reflected today in federal policies such as NCLB. But in order to understand how standards are used as policy instruments a brief history of the standards-based movement and how it became part of induction and mentoring programs is needed.

History of Standards-Based Reform and Induction/Mentoring Programs

The back-to-standards movement began in the late 1980s, ignited by *A Nation at Risk* which decried the mediocre status of American education (Honig, 2006; Swanson & Stevenson, 2002; Urban & Wagoner, 2004). This standardization movement was reflected in the outputs produced by all levels of education including professional education organizations and institutions. State departments of education created learning and teaching standards and assessments aligned to them; the National Council of Accreditation for Teacher Education (NCATE) adopted new performance standards for teacher preparation entities desiring accreditation (Urban & Wagoner, 2004). During this period three educational standards movements converged: The content knowledge

standards movement, which created a framework for subject matter knowledge that prospective teachers needed; student standards, which delineated what students needed to know and be able to do; and teacher standards, which described what educators must know to help students reach the goals outlined in the student standards (Swanson & Stevenson, 2002; Wise & Leibbrand, 2000).

Although state departments of education were responsible for writing and school district for implementing this new voluntary curriculum standards system, the federal government began demanding accountability from the states in terms of student achievement. NCLB put a system of sanctions in place which held public schools, districts and states accountable for student outcomes through the "institutionalization" of standardized assessments (Urban & Wagoner, 2004); schools that did not obtain satisfactory scores on these tests for two consecutive were placed in a tiered system of sanctions (Urban & Wagoner, 2004) with the final consequence being the closing or the repurposing of the "failing" school.

In a similar vein, induction or mentoring program standards came into existence around the late 1980s and early 1990s as states, such as California and Connecticut began creating state induction and mentoring policies and programs (Arends, Rigazio-DiGilio, 2000; Olebe, 2001) during the second wave of educational reform (Furtwengler, 1995). However, unlike the accountability system for public schools under NCLB, there tends to be few consequences for the entity offering the induction or mentoring program since not all new teachers participate in induction programs due to the voluntary nature of some programs (Bartlett & Johnson, 2009; Fletcher, Strong & Villar, 2008). Furthermore,

unless the induction program is tied to a cleared state teacher licensure (e.g., Connecticut, Illinois, Wisconsin, Ohio) or one in which one of the induction's goals is to evaluate the beginning teacher for the purposes of possible further employment (e.g., Peer Assistance and Evaluation Program [PAEP] in Cincinnati, Carver & Feiman-Nemser, 2009) or one which requires program evaluation (Smith, 2007) induction and mentoring programs seem to have few enforcement teeth (Smith, 2007). Moreover, there is great variability among different induction and mentoring programs (Bartlett & Johnson, 2009; Wang, Tregidgo & Mifsud, 2002) especially in regard to governance and the use of standards.

The Variability of Induction and Mentoring Programs

Induction and mentoring programs can take on multiple structures from how they are governed and funded to how mentors are selected and trained (Furtwengler, 1995; Smith, 2007; Wang et al., 2002). For instance, some states have standards for beginning teacher induction, or standards for "learner-centered" proficiencies or standards for learning and technology for school personnel (Wang et al., 2002). There are also varying governing arrangements for induction and mentoring programs; some are delivered at the district and school levels (Carver & Feiman-Nemser, 2009); others are collaborations between universities and school districts (Arends & Rigazio-DiGilio, 2000; Huling-Austin, 1990; Villani, 2009); still others are state-developed and state-mandated programs (Bartlett & Johnson, 2009; Carver & Feiman-Nemser, 2009; Smith, 2007) which may or may not have standards or even frameworks that guide the induction or mentoring programs.

Professional groups and researchers have been trying to capture the "quality" or "effective" characteristics of an induction program which include mentoring as a chief component (Bartlett & Johnson, 2009; Feiman-Nemser, Schwille, Carver & Yusko, 1999; Moir & Gless, 2001). Some organizations such as the New Teacher Center define quality induction as having the following components: Program vision, institutional commitment and support, quality mentoring, professional standards, and classroom-based teacher learning (Moir & Gless, 2001). Others emphasize that the relationship between the mentor and mentee will go through stages which are reflected in the program: from introduction phase in which the relationship is fostered through the sharing of ideas and personal philosophies to unity phase in which the mentor and mentee are partners in the real-life classroom (Jones & Pauley, 2003). Quality, in addition seems to be a function of where the induction occurs; more affluent districts can pay for their own induction programs whereas urban districts may be able to use "soft" money to support new teachers (Bartlett & Johnson, 2009). This has the potential to leave some districts struggling to fund induction or mentoring programs.

Induction programs also appear to reflect their goals; a program designed to increase beginning teacher retention might look different from one focused on supporting the beginning teacher's professional knowledge (Bartlett & Johnson, 2009). For instance, for the novice teacher "serious" induction, focused on teacher learning require "common" frameworks (e.g., professional teaching standards) and performance assessments of the beginning teacher, tied to standards from which an individualized learning plan is devised. For the mentor, this means preparing, training and supporting the mentor such as

giving time for mentors to meet together to discuss their work with beginning teachers (Feiman-Nemser, 2001a).

Statement of the Problem

To address the high rate of teachers leaving the occupation within the first three to five years of teaching especially in high poverty schools (Darling-Hammond & Sykes, 2003; Ingersoll & Perda, 2009, 2010; Smith & Ingersoll, 2004) comprehensive induction and mentoring programs have been offered as a possible solution to these concerns (Achinstein & Athanases, 2006a; Ingersoll & Strong, 2011; SEDL, 2000). The loss of teachers however, is not a problem of supply but rather it is a problem of retention of "pre-retirement" teachers; organizational factors such as the inadequate administrative support and poor salary are common reasons for teachers leaving the occupation or moving to other schools (Ingersoll, 2001; Ingersoll & Perda, 2010). Certain content areas such as mathematics and science in particular lose more beginning teachers than their counterparts after their first year (Ingersoll, Merrill & May, 2011). In states such as Texas, attrition rates for beginning teachers despite the size of the school district between academic years 2007-2008 to 2009-2010 was quite high. According to March 19, 2009 Texas Association of School Boards' newsletter HR Exchange, Texas could only hire about half of the needed mathematics and science teachers. Moreover, the state could only fill 20% of the needed high school science teachers with "fully" qualified teachers in which thirty to thirty-five percent of teachers of mathematics and science were teaching out of field. The hardest hit, however, were low performing high schools in which 41% of its science teachers were teaching out of field (TASB, 2009).

Although some turnover within an organization is normal and in fact, optimal for the health of the organization (Ingersoll, 2001; Ingersoll, Merrill & May, 2011), there are costs to having a high teacher turnover. A high turnover rate creates instability which makes it difficult to implement reform and maintain coherent instruction (Boyd, Grossman, Lankford, Loeb & Wycoff, 2007); more monies and time will be needed to be allocated for recruitment to replace the loss of teachers (Boyd et al., 2007); expertise gained through professional development will be lost as teachers leave the school (Guin, 2004); and teacher turnover has the potential to impact student learning if more effective teachers are the ones leaving (Boyd et al, 2007). More importantly perhaps, is that the loss of beginning teachers affects the morale of the remaining staff, causing a "chaotic" environment for those who remain in the school (Guin, 2004; Ingersoll, 2001).

Finally, the demographics and the reasons for individuals becoming teachers are changing. From 1987-1988 to 2007-2008 the number of beginning teachers has increased four-fold from 50,000 to 200,000 in which the modal teacher has changed from one with fifteen years of teaching experience in the late 1980s to a teacher in her first year (Ingersoll & Strong, 2011). In addition, those coming into the field are different from those they are replacing, some are mid-career job shifters; some are coming through alternative route programs (Johnson, 2006 as cited in Unruh & Holt, 2010) and finally others do not see teaching as a lifetime career commitment (Peske, Liu, Johnson, Kauffman, & Kardos, 2001). The challenges to creation of effective induction and mentoring programs need to be addressed to understand the rationale for studying induction and mentoring programs and how standards may alleviate some of them. This

list is not comprehensive but it is a review of the extant research that gives some of the challenges for developing high quality teachers in shortage content and geographical areas.

The Proliferation of Teacher Preparation Entities and Their Potential Impact

Since there has been a proliferation of teacher preparation programs from alternative to more traditional pathways over the last twenty years (Zeichner, 2010), teachers come to the classroom with a wide range of skills, abilities, experiences and training. These differences appear to impact beginning teacher needs (Roehrig & Luft, 2006) and retention. Beginning teachers, depending on their training may be more or less likely to leave the field. For instance, it was found that teachers who were trained through alternative routes were slightly more likely to leave after the first year than those training through more traditional routes (Ingersoll, Merrill & May, 2011). One component, pedagogy appears to be a significant indicator in whether a beginning teacher stays or leaves. Teachers with three or more courses in teaching methods or strategies were significantly more likely to stay than those with less pedagogical training. Mathematics and science teachers, in particular were more likely to not have these experiences thereby increasing their likelihood to leave the profession (Ingersoll, Merrill & May, 2011). Finally, studies on mentoring do not usually address how helpful the induction and mentoring programs are with those individuals with less formal teacher preparation (Ingersoll & Kralik, 2004). , The focus of this study will be on mathematics and science teachers and although there will be not be a comparison with other content areas, this study may yield some unique challenges for the use of standards.

Some Limitations of Current Induction and Mentoring Studies

There are many limitations to the current induction and mentoring studies. First, much of the research in mentoring of beginning teachers examines the needs of mentees from their perspective or from that of the mentor (Hobson, Ashby, Malderez & Tomlinson, 2009) as well as the organizational structures and school cultures which may or may not be supportive of mentees (Kardos & Johnson, 2007; Kardos, Johnson, Peske, Kauffman & Liu, 2001; Johnson, Kardos, Kaufman, Liu & Donaldson, 2004). Second, few studies examine comprehensively what mentors need to help beginning teachers to develop teaching expertise and knowledge in terms of professional development, district and school structures and policies that support them. Third, many of the mentor and induction empirical studies use data before NCLB (e.g., Ingersoll & Kralik, 2004; Smith & Ingersoll, 2004; Yusko & Feiman-Nemser, 2008). Although one could argue that the effects of mentoring are universal and hence, not dependent on other (external) policies, such as NCLB this may indeed be a naive approach. The motivation and will to implement an induction or mentoring policy may be influenced by environmental stability and other social-political contextual factors (Yin, 1981 as cited in McLaughlin, 1987). Indeed, it may be that this context affects the outcomes of a policy (McLaughlin, 1987). Fourth, there seems to be a paucity of studies that look at the policy instruments such as standards (See Carver & Feiman-Nemser, 2009) that support induction and mentoring programs and their effects on mentor capacity. Instrumental policy tools such as salary for the mentor, ties to teacher certification and assessments of the beginning teacher may also have impact on mentor and mentee quality and capability.

To address some of these issues: 1) I observed the mentor conducting observations of the novice teaching, and the subsequent post conferences; I examined mentoring and induction materials, and I conducted interviews and focus groups to assess how mentoring standards were (and were not) interpreted and implemented ; 2) I used descriptive mentoring data well after NCLB was passed into law; and 3) I focused on how mentoring standards as a policy instruments fit together with the policy aims, mentor and mentee capabilities, differing policy environments as well as other policy instruments. However, there are some limitations that this research cannot completely compensate. First, since this study will be qualitative with some descriptive analysis of mentors, beginning teachers and their schools, this study will not be able to make causal inferences (Willis, 2007) but it will be able to give a rich description (Bogdan & Biklen, 2007) of what is occurring within a particular school, in regard to mentoring standards with a specific group of teachers and principals.

Content-Specific Needs for Mentor and Mentee

A beginning teacher's needs may be general or content-specific, depending on the teacher's subject area, school level or grade. Special education educators and researchers, for instance have argued that beginning teachers in their field need different types of support since they play many roles in the school and in many cases, teach multiple subjects (Kennedy & Burnstein, 2004; Lava, Recchia & Giovacco-Johnson, 2004; Muller & Burdette, 2007). Oftentimes the needs for mathematics and science teachers are assumed to be similar. But science researchers argue that the latter is sometimes depicted as needing to know more content and pedagogy (Emmer, 1986, as cited in Luft, Roehrig,

& Patterson, 2003; Sanford, 1988, as cited in Luft et al., 2003) than the former. For instance, in the science beginning teachers may need specialized support such as modeling inquiry-based lessons, planning and conducting laboratory instruction (Luft & Patterson, 2002).

Induction may need to look different for teachers in different content areas especially to meet the student and teaching standards for their particular subject. For instance, in a study that compared no induction, generalized induction and induction tailored to the needs of beginning science teachers it was found that those beginning science educators through the latter program planned and implemented more laboratories, more inquiry-based instruction and conducted more standards-based lessons than the other teachers, inducted through other programs (Luft et al., 2003). This research lends support to the premise that science-specific induction plays a role in beginning teacher instructional practice.

To highlight the unique issues surrounding beginning mathematics and science teachers, this study looks only at the mentoring of novice teachers within these two content areas in the middle school context. The training that the mentors received came either from a mentor trainer who had participated in mentor training program under the auspices of the state's regional collaborative office, based at a major research university in Texas or from an earlier "research-based" mentor training program. This state educational entity only offers professional development for mathematics and science teachers, including the training of the mentors and the trainers of the mentors, under the Beginning Teacher Induction and Mentoring (BTIM) program. Although there may be

some general mentoring strategies and techniques given from this entity, it purposively is designed for these content areas.

Lack of Agreement on Standards for Mentoring & Induction Program Frameworks

Similar to defining "good" teaching, "good" mentoring is not a universally agreed-upon concept (although there is agreement that not all good teachers make good mentors, Achinstein & Athanases, 2006a). Mentoring still appears to be under-theorized (Ingersoll & Strong, 2011) and as a field, still wanting to be professionalized (Schwille, 2008) and conceptualized (Athanases, Abrams, Jack, Johnson, Kwock, McCurdy, Riley & Totaro, 2008) as seen in the multitude of literature reviews examining the effects, including the benefits and the burdens that induction and mentoring programs have had on mentors and mentees (e.g., Hobson et al., 2009; Ingersoll & Strong, 2011; Feiman-Nemser et al., 1999; Wang & Odell, 2002; Wang, Odell & Schwille, 2008). One critique is that researchers know what programs work but not what elements within these programs are effective (Ingersoll & Strong, 2011). Indeed, one area of contention is whether the mentoring relationship is compatible with having the mentor in the dual role of beginning teacher supporter and evaluator (Carver & Feiman-Nemser, 2009; Feiman-Nemser et al., 1999; Yusko & Feiman-Nemser, 2008).

Although there appear to be some commonalities among some "quality" induction frameworks such as a program focus on beginning teacher development and the need for a supportive teaching environment with as "strong" mentoring component (Feiman-Nemser et al., 1999) there still exist different frameworks and standards for mentoring and induction programs. Indeed, there are many standards and guidelines generated by

states, professional organizations, and collaborations between universities and districts concerning induction and mentoring programs. Indeed, in the early 2000s there were over thirty states that had mentoring or induction programs for beginning teachers, but there was no common agreed upon framework on what these programs should look like (Wang et al., 2002). Sometimes there are no standards specifically tailored for beginning teachers rather there are standards for all teachers. Professional organizations such as the National Committee of the Accreditation for Teacher Education (NCATE), the National Board for Professional Teaching Standards (NBPTS) and the National Council for the Teaching of Mathematics (NCTM) have specified what teachers need to know and be able to do in the classroom (e.g., NBPTS, 2010; NCATE, 2008; NCTM, 2000).

One of the biggest influences on professional teaching standards appears to be those developed by the Interstate New Teacher Assessment and Development (InTASC), a consortium of teacher education experts and practitioners brought together by the Council of Chief State School Officers as evidenced by 38 states who have either used or adapted these standards during their own standards-setting process and NCATE which has based their accreditation practices on them (Young, Wiggins, Salazar, Diez, & Paliokas, 2011). However, these standards have been criticized by groups such as Teachers for New Era since they are perceived as normalizing teaching and are not based on an "empirical research base" (Young et al., 2011). In April 2011 these standards were updated to "outline essential research-based knowledge, dispositions and performances regardless of the subject or grade level being taught" (Young et al., 2011, p. 23) for all teachers, not just beginning ones (CCSSO, 2011).

As mentioned earlier in this chapter, some of these teaching standards have manifested themselves into formative assessments for beginning teachers which are used by mentors to observe the teaching practices of the novice in states such as California (Carver & Feiman-Nemser, 2009; Olebe, 2001), and/or professional portfolios which the novice presents for state licensure in states such as Connecticut (Carver & Feiman-Nemser, 2009). Despite all the differences within the various frameworks, some organizations such as the National Association for the State Board of Education have called for "the selection criteria, roles and functions of mentors, defined in terms of standards, should be clearly articulated both to the mentors and to the beginning teachers and a mechanism should be in place to ensure that mentors meet those standards" (NASBE, 1998, p. 32 as cited in Feiman-Nemser et al., 1999). In other words, there appears to be a call for more specification on what it means to be a mentor.

The discussion concerning standards still seems to hover exclusively around what beginning teachers need to know and be able to do in the classroom and not examining what mentors and mentees need to be able to know and do within the mentoring relationship. Mentoring standards, which encompass both what the mentor and mentee need to know and be able to do appear to be a mechanism to help guide the mentor and mentee to meet the policy aims of increasing beginning teacher quality and improving the beginning teacher retention rate. This study focuses on mentoring standards to see how their interpretation and implementation affect the mentor-mentee relationship.

The Under-Studied Context: Middle School & High-Poverty Schools

Berliner (2001) calls context the "third variable" when defining how a teacher develops her expertise in the classroom (with the other variables being talent and deliberate practice). It plays a powerful role in how a teacher gains competency as she goes through the various stages of teacher development in which each phase requires different supports. For example, the beginner will need to be externally supported through manipulation of the school environment; however, as the educator gains experience, the amount of scaffolding will decrease (Berliner, 2001). Context also plays a role in how a policy gets implemented; the teacher may for instance, tailor a policy to suit their particular circumstances (McLaughlin, 1987).

When examining the effectiveness of mentoring programs, one focus needs to be on how the setting—urban or suburban school districts, low-income or affluent schools, low performing or high performing schools, high school or elementary school impacts induction or mentoring for beginning teachers (Ingersoll & Strong, 2011). For instance, in their examination of context and experience with curriculum and mentoring researchers have found a "support gap" between teachers who teach in low-income schools (in which 50% or more of the students qualify for free or reduced lunch) and those in high-income schools (in which 15% of students are in the program, Johnson, Kardos, Kauffman, Liu & Donaldson, 2004); those teachers in low-income schools had less support in mentoring and curriculum assistance than those in high-income schools (in which 15% of students are in the program, Johnson et al., 2004).

In another study it was found that state and district policies which emphasized accountability and instructional reform, in conjunction with local context and beginning teacher characteristics impacted beginning teacher's socialization into teaching. Achinstein, Ogawa and Spieglman (2004) found from their case study of two elementary beginning teachers, participating in the same induction program in two districts with similar student demographics, but with differing professional cultures, amounts of human and physical capital and academic performance on state testing that these teachers had had different teacher socialization experiences. These authors argued that these contexts created two tracks of teacher: one for the higher performing school and another for the low performing school which was reflected in the type of socialization that these two beginning teachers received. More troubling for these researchers was "how accountability and standards-based instructional policies intended to foster equity inadvertently constrained the socialization experiences of new teachers working in a school district that serves a high proportion of students from low income and culturally/ linguistically diverse backgrounds"(Achinstein et al., 2004, p. 593).

School culture, as a component of context also appears to affect the amount of support that a mentee receives. For instance, beginning teachers perceive the amount of collegial interaction as dependent on school culture (Kardos & Johnson, 2007). Kardos et al. (2001) identified three types of school culture: veteran oriented, novice oriented and integrated professional cultures. These professional cultures of the school depended on the age of the institution, and the formal and informal structures which promoted opportunities for interaction. Researchers have discovered that within integrated

professional cultures, novice teachers received sustained support and had continuous interactions with teachers from all experience levels; expert teachers saw the import of mentoring these new teachers in which all teacher were "regularly engaged in deliberations about curriculum, instruction and their shared responsibility for students" (Kardos et al., 2001, p. 262).

Finally, research on mentoring and induction programs does not seem to be school-level specific. Emphasis may be, for instance on the kind of mentoring (e.g., science-specific) or the culture of the school in which the mentoring and induction takes place. It appears to be happenstance that one study is at the elementary and another at the secondary level. In other words, the emphasis is not on how mentoring plays out in the elementary school versus middle school despite the fact that at times, descriptive information may be divided by the level of the school. Moreover, if middle school is within the context of one of these studies, it tends to be lumped together with high school, failing to look at how middle school context might create unique circumstances for the mentor and the mentee. For instance, at the middle school the teacher is more specialized than at the elementary level. Remaining unexamined are questions such as: 1) Does the school level make a difference to the mentoring relationship, and 2) Does the impact of mentoring standards vary by school level?

Within today's educational policy world, the use of standards appears to be a commonsensical approach to reform education but they are rarely challenged as a policy tool that affects change. Moreover, although there has been a multitude of studies, both empirical and descriptive on the effectiveness of induction and mentoring programs

(Ingersoll & Strong, 2011) and a few that examined how standards-based reform have impacted (or not) the mentor-mentee relationship (Wang & Odell, 2002), the interpretation and implementation of mentoring standards have on the mentor-mentee relationship appears to have been understudied or unexamined. This study bridges this research gap

Purpose of the Study

Thus, the purpose of this study is to examine how the interpretation and implementation of mentoring standards affects the mentor-mentee relationship. Namely, using Cohen and Moffitt's (2009) framework on policy implementation this study will examine one primary question: How does the interpretation and implementation of mentoring standards in high poverty middle schools influence the mentor-mentee relationship?

Overview of Methodology

This study is a qualitative study (Bogdan & Biklen, 2007) which examined how the interpretation and implementation of mentoring standards as a policy instrument affects the mentor-mentee relationship in seven high poverty middle schools in three districts in central Texas. The "research-based" mentoring training materials, given at the initial mentor training and/or used to train the mentor trainers as well as the common mentoring book were gathered and analyzed. I also analyzed Texas educational code and the mentor commitment contracts. In these documents I looked for mentor and mentee role definitions as well as the tools used to conduct mentoring activities. I interviewed all seven middle school principals at the beginning and the end of the school year (save one

principal who did not want to be interviewed at the end). I also conducted two interviews of the five mentors (two science and three mathematics) and nine mentees (five mathematics and four science): once at the beginning and once near the end of the school year. Moreover, I observed the mentor observing the mentee teaching, followed by an observation of the subsequent post-conference. In these observations, I looked for any tools, formal or informal used by the mentor. After these post-conferences, I conducted separate interviews with the mentor and mentee (See Appendices A and B for a list of the interview questions). The triangulation of data not only gives a rich, deep description of the mentoring relationship within a particular middle school context but also helps in reducing any bias in the analysis of the data.

Lastly, since mentoring standards are policy instruments as well as components of induction and mentoring programs, I utilized Cohen and Moffitt's (2009) policy implementation framework to tell the story of how the interpretation and implementation of mentoring standards affected the mentor-mentee relationship in seven high poverty middle schools This framework consists of four elements: policy instruments, policy aims, capability and capacity, and the environment. Each element will be examined individually.

Significance of the Study

Current research in induction and mentoring tend to be of three types: evaluative studies in which the outcomes are student achievement, beginning teacher knowledge, and/ or beginning teacher retention (e.g., The Dana Center, 2002; Glazerman, Dolfin, Bleeker, Johnson, Isenberg, Lugo-Gil, Grider, Britton & Ali, 2008; Ingersoll & Smith,

2004; Ingersoll & Strong, 2011; Isenberg, 2009; Kapadia et al., 2007; Rockoff, 2009; Smith, 2007), qualitative studies that look at the "quality" of the mentoring relationship in various contexts (e.g., Abell, Dillon, Hopkins, McInerny & O'Brien, 1995; Achinstein et al., 2004; Adams & Krockover, 1997; Johnson et al., 2004; Kardos & Johnson, 2007; Orland-Barak, 2005; Orland-Barak & Hasin, 2010) usually via the mentee's or mentor's perspective (Hobson et al., 2009) or policy-oriented research papers examining the various state or district policies surrounding induction or mentoring programs (Bartlett & Johnson, 2009; Carver & Feiman-Nemser, 2009; Youngs, 2007). Moreover, discussion of standards within mentoring relationships appears to be limited to how national or state content standards (Wang & Odell, 2002; Wang et al., 2008) are being witnessed within the mentor-mentee relationship as demonstrated in beginning teacher's instructional practice (e.g., Bradbury, 2010; Luft et al., 2003; Luft & Patterson, 2002); or how standards are embedded within students assessments, used by mentors to help beginning teachers learn about their students (e.g., Athanases & Achinstein, 2003). This study bridges the gap between policy and practice and provides information to policy makers, and educational officials about the use of mentoring standards as a policy instrument within induction and/ or mentoring programs Although student and teaching standards cannot be separated from the mentoring standards in practice, particular focus will be on how the mentoring standards affect the mentor-mentee relationship..

Assumptions

There are some basic assumptions that the author of this study is making:

1) The mentor teacher has a desire to help the beginning teacher improve her instructional practice and get adjusted to the middle school context;
2) There is fidelity in the implementation of Texas' mentoring framework and standards;
3) The induction and mentoring standards are known by the mentor and the beginning teacher;
4) The mentor has been trained to mentor via a "research-based" mentoring program as sanctioned by the state's department of education; and
5) The mentor is compensated for work with the beginning teachers in the form of mentor stipends.

Delimitations and Limitations

This study focuses on the mentoring of beginning mathematics and science teachers at the middle school level. Other content areas involved in induction or mentoring programs such as those in special education and English Language Learner though understudied will not be examined within this study. Thus, the implications for this research will be limited to the context of beginning mathematics and science teachers at the middle school level. In addition, this study will not make a comparison between different school levels such as elementary and secondary. Finally, since this will be a qualitative study comprised of interviews, focus groups and observations in a particular context, generalizations cannot be made since the results will be context specific.

Summary

This chapter serves as a brief introduction to the challenges of retaining and supporting beginning teachers. Due to the high turnover rate for beginning teachers as well as the changing demographics of teachers and how they are trained, induction and mentoring programs have been offered as a solution. At issue is not only stopping the revolving gate of departing beginning teachers but also to build and improve upon their instructional practices as they are socialized into teaching. But the challenges to having quality teachers appear to be greater for math and science teachers since they are more likely more likely to be alternatively certified but less likely to have had pedagogical training.

To create quality teachers of science and mathematics is an ambitious goal. Professional teaching standards are offered as one policy tool to reduce the ambiguity and build capability of the mentor and mentee. However, the interpretation and implementation of mentoring standards within the mentor-mentee relationship is usually unexamined in research. This study is an attempt to bridge that gap between research and practice through an examination of mentoring standards as a policy instrument through Cohen and Moffitt's policy implementation framework to determine if mentoring standards matter.

In Chapter 2, an examination of the history of standards as policy instruments as evidenced in induction and mentoring programs as well as the policies that created them will be undertaken. In addition, the effects of induction and mentoring programs on beginning teachers will be examined as well. Since the focus of this study is on

mentoring standards, statements that delineated what mentors and their mentees will need to know and do within the mentor-mentee relationship, an examination of the literature concerning mentor knowledge, the roles and the supports for mentoring is also warranted. In particular, the needs and challenges of mentoring beginning mathematics and science teachers will be scrutinized. Finally, the conceptual framework for this study will be described. This framework guides this study.

CHAPTER 2: REVIEW OF THE LITERATURE & CONCEPTUAL FRAMEWORK

The use of standards, frameworks and guidelines in education used to stipulate what K-12 students and teachers should know and be able to do have a long history. Beginning in the late 1980s during the standards-based teaching reform movement, state departments of education began developing student learning and teaching standards (Cross, 2010). Standards were viewed then as they are today as a means to change how teachers are trained, supported and evaluated. Federal policies such as No Child Left Behind of 2001 (NCLB) and Title II of the Higher Education Act of 2008 reflect this stance especially in regard to how teacher quality and student outcomes are defined and assessed. However, the effects of state and federal accountability policies such as NCLB appear to have had unintended consequences, namely they appear to have created an uneven distribution of highly qualified teachers within public schools (Darling-Hammond & Sykes, 2003; Sunderman & Kim, 2005) and the potential to drive some beginning teachers out of education for fear of low student performance (Kauffman et al., 2002). Moreover, the opening of the teacher preparation market to alternative entities seems to have allowed some teaching candidates to enter teaching without pedagogical skills (Ingersoll, Merrill & May, 2011) needed to improve student achievement outcomes. The overall effect of these policies has been having the least experienced and the least "qualified" teachers in some of America's neediest public schools (Darling-Hammond & Sykes, 2003); this effect seems to be compounded by a revolving door of teachers,

entering and exiting from schools and in some cases from education entirely (Ingersoll, 2001; Ingersoll & Perda, 2009; Ingersoll & Smith, 2004; Smith, 2007).

To stop the flow of exiting beginning educators, states such as Connecticut and school districts such as Cincinnati began in the mid to late 1980s developing induction programs, in which mentoring was a substantial component (Carver & Feiman-Nemser, 2009). The focus of these induction programs was to build upon the beginning teacher's knowledge base (Feiman-Nemser et al., 1999; Carver & Feiman-Nemser, 2009). Standards are the backbone for these induction programs but they seem to vary depending on how the state supported these programs (See Furtwengler, 1995; Wang et al., 2002). Some "standards" were programmatic; they usually described the components of the programs. For instance, some state guidelines covered areas such as mentoring activities, mentor selection and training, and beginning teacher development and training, including roles and responsibilities of the beginning and mentoring teacher (e.g., Massachusetts Department of Education, 2001; State Board of Education Certification, 2005). Other standards were primarily focused on the beginning teacher. For instance, in California previously established state teaching standards were incorporated into the formative assessments that the mentor would use to evaluate the beginning teacher; these were used to develop professional development goals for the novice teacher (Carver & Feiman-Nemser, 2009; Feiman-Nemser, 2001a). Still other state induction standards tended to cover areas such as mentor qualifications (e.g., mentor and mentee in the same grade at the same school) and training (ICF International, 2009). In Texas, for instance

mentor teachers need to participate in a "research-based" mentor training program as approved by the state education's agency (ICF International, 2009).

This chapter will examine the evolution of educational standards as part of the standards-based movement which began in the late 1980s to early 1990s as well as look at how standards as policy instruments are evidenced within induction and mentoring programs. In particular, three states' (California, Connecticut and Texas) induction and mentoring programs will be highlighted, demonstrating how standards are used within each. Moreover, the effects of induction and mentoring programs will be highlighted. Since the focus of this study is on mentoring standards, statements that delineated what mentors and their mentees will need to know and do, an examination of the literature concerning mentor knowledge, the roles and the supports for mentoring is also warranted. In particular, the needs and challenges of mentoring beginning mathematics and science teachers will be scrutinized. Recent evaluations of induction and mentoring programs will be looked at especially in regard to the outcomes. Finally, the conceptual framework for this study will be described. This framework will help guide this study.

Systemic Reform: Standards-Based Reform Movement

In the late 1980s, after the publication of *A Nation at Risk*, which placed the blame for America's weak educational system on low standards (Porter, 1994; Roeber, 1999) the federal government began playing a larger role in teacher educational reform (Bales, 2006). Indeed, Manna (2010) traces the origin of standards, specifically content-based standards and their alignment to student assessment to a paper, written by Marshall Smith and Jennifer O'Day in 1988. The idea of systemic reform was quite a radical

notion since it encompassed all levels of education from K -12 to post-secondary education. Although systemic reform may have different names such as "coherent guidance", there are three essential tenets, according to O'Day and Smith (1993): 1) cCurriculum frameworks which delineated what students should be able to know and do; 2) alignment of state education policies concerning teacher licensure and preparation, and state and locally adopted curriculum materials and assessments; and 3) local control and governance of the system in which the school determined how it was going to "design and implement effective strategies for preparing their students to learn the content of the curriculum frameworks to a high level of performance" (O'Day & Smith, 1993, p. 251). In essence, the entire educational system needed to be aligned: Curriculum with standards, tests, teacher preparation, and resource allocation (Cross, 2010; Polikoff et al., 2011).

The standards-based movement was reflected in the actions at federal level. In 1989 President George H.W. Bush convened the Charlottesville Education Summit with the state governors, and the presidential cabinet to discuss how to make the U.S. more competitive with other nations and improve public schools. One common theme emerged from these discussions: The need to set educational goals that focused on educational outcomes rather than inputs (Cross, 2010). A few months later a set of national education goals, America 2000 was written; one of its goals stipulated that after completion of grades 4, 8 and 12 American students needed to show competency in English, mathematics, science, history and geography (Cross, 2010; Urban & Wagoner, 2004). However, after three years there was no legislation which codified these goals into law

(Cross, 2010). But the tone had been set. States had begun developing content standards, called curriculum frameworks or guidelines (Porter, 1994). Moreover, in 1989 the National Council of Teachers of Mathematics (NCTM) produced the first set of voluntary content standards for K-12 mathematics (Cross, 2010; Porter, 1994).

Basic standards gave way to higher ones (Porter, 1994). These new standards stressed high order thinking skills and "deep conceptual understanding" of content. Moreover, although there have always been standards in American educational system (e.g., grades), the standards of the 1990s had two distinctions: They were for all students and they needed to specify what the student needed to know and be able to do. By the mid-1990s the standard-setting that began with the development of performance targets for students in public schools, extended into standards-setting for teachers (Porter, 1994)

Improving America's Schools Act of 1994

In 1994 with the re-authorization of the Elementary and Secondary Education Act (ESEA), called the Improving America's School Act (IASA), states needed to create content and performance standards for all students in the same subjects, delineated in Goals 2000 (Cross, 2010). This was a significant step for the federal government since it demanded that standards, assessment, teacher training, curriculum and accountability had to be linked under what was called "systemic reform" (Cross, 2010). As explained by Cross (2004), systemic reform meant:

> Adults in the system must be held accountable for performance, but performance must be based on academic content and performance standards developed and adopted at the state level. Curriculum must be developed that ensures that the standards are taught, and teachers trained to teach the material. Finally, new tests must be developed that are carefully aligned to the standards, which in turn must

> be reflected in the curriculum, and adults (and students) must be held accountable for children's learning the material. (p. 113)

No Child Left Behind Act of 2001

In 2001, under the George W. Bush administration, the ESEA was reauthorized as the No Child Left Behind Act (NCLB) (Manna, 2010). It stipulated that schools and school districts were to be held accountable for student achievement as measure by state standardized assessments in mathematics and language arts in grades three through eight (Manna, 2010). In particular, the content areas of mathematics and science as noted by then President George W. Bush were key areas for United States' future prosperity (Federal News Service, 2001 as cited by Manna, 2010, p. 128). NCLB seems to rest on four principles: 1) Use of annual testing to gauge student learning; 2) flexibility to states and local leaders to "innovate" to create better learning for children thereby shifting responsibility for this policy from the federal to state governments; 3) federal assistance to "failing" schools; and 4) school choice through vouchers (Manna, 2010). Although by 2001 nearly every state had content standards which were linked to assessments, in many cases according to Citizens' Commission on Civil Rights (2001 as cited in Manna, 2010), the content in the standards were not aligned to the testing. Moreover, standards in and of itself and the information garnered from annual testing seem to be "insufficient" to motivate educators to change instructional practices and students to reach high standards (Hochberg & Desimone, 2010). In addition to the creation of state standards for content with links to K-12 assessments, NCLB also put the spotlight on teacher quality by defining a "highly qualified" teacher. In particular, teachers needed to have a full state teaching license or be enrolled in an approved alternative certification program, have a

bachelor's degree and demonstrate competency in the subjects that the teacher taught (Manna, 2010).

Although some standards were voluntary such as NCTM's professional teaching standards and the states' basic K-12 content standards, NCLB with its system of rewards and sanctions added a new element: accountability. The goals under NCLB was an ambitious: raise student achievement for all students while closing academic gaps between whites and students of color and between the affluent and the less affluent student (Cohen & Moffitt, 2009) and raise the quality of teachers in public schools. But the distance between the policy and the capacity of implementers to reach these political aims were great so policy instruments such as money and mandates needed to be introduced to create greater capacity (Cohen & Moffitt, 2009; McDonnell & Elmore, 1987).

Standards as Policy Instruments in Induction and Mentoring Programs

According to Cohen and Moffitt (2009) policy instruments "are socially created tools that are intended to encourage assent or to help realize the aims in practice or both" (p. 25). They also help to "translate substantive policy goals (e.g., improved student achievement, higher quality entering teachers) into concrete actions" (McDonnell & Elmore, 1987, p. 134). Within state induction policies, there can be several key policy instruments. For example, in Connecticut these instruments are standards frameworks, mentoring and professional development such as workshops and portfolio assessment, completed by the beginning teacher to obtain a state teaching license (Carver & Feiman-Nemser, 2009), whereas in California, the policy instruments were slightly different;

mentors used formative assessments, based on standards for the beginning teacher to evaluate the novice (Carver & Feiman-Nemser, 2009). However, both states utilized the same tool (though in different forms): Standards. Indeed, even in some districts standards were the central focus of induction programs, specifying what teachers must know at each grade level and content area, including the type of student work to evaluate and how to assess it (Carver & Feiman-Nemser, 2009). Policy instruments are designed to bridge the gap between policy and practice (Cohen & Moffitt, 2009) by operationalizing the policy goals (McDonnell & Elmore, 1987) thereby reducing ambiguity for implementer (Cohen & Moffitt, 2009; Little, 1990).

In this study mentoring standards will be viewed as policy instruments, designed to define the mentoring roles thereby purportedly reducing the ambiguity on the part of the mentor and mentee. Indeed, the need to conceptualize (Athanases et al., 2008; Carver & Feiman-Nemser, 2009) and professionalize mentoring through defining what a mentor should know and be able to do and stipulating the essential components for an induction and mentoring program (Schwille, 2008) appear to be the missing link within some schools, districts and states offering induction and mentoring programs. As Little (1990) comments, oftentimes the "what should I do?" and the "why am I doing this?" are not resolved within an organization. Indeed, the greatest ambiguity might transpire within organizational norms that do not "link" mentor roles to professional growth or career advancement (Little, 1990). For instance, the mentor teacher may need to give direct suggestions to the novice to help improve instruction. This mentor role (or action) is in conflict with the norms of teaching especially the norms of teacher autonomy and non-

interference (Little, 1990). This implies that there may need to be changes within the organization in addition to mentoring standards to put the focus on teacher learning and growth. Therefore, in studying the impact of mentoring standards on the mentor-mentee relationship, in particular the culture of the school needs to be examined as well. Although there are studies that examine how supportive particular types of cultures appear to be important to a novice's professional growth (Kardos & Johnson, 2007; Kardos et al., 2001; Johnson et al., 2004), they do not examine how mentoring standards may affect the mentoring relationship, which may in turn influence the mentoring roles and the quality of the mentoring.

Standards in Induction and Mentoring Programs

There is a great variety of types of induction and mentoring programs. For instance, they can vary by the type of governance, funding, mentor roles and goals for the program (Bartlett & Johnson, 2009; Furtwengler, 1995; Smith, 2007; Wang et al., 2002); they can also vary about the amount time, given for the induction process usually from one to three years (Feiman-Nemser et al., 1999). Moreover, although the alignment of mentoring with standards of professional teaching and teacher learning is a relatively recent phenomenon (Odell & Huling, 2000 as cited in Wang & Odell, 2002), there are a multitude of standards under which these induction and mentoring programs could operate. For instance, there are the Interstate New Teacher Assessment and Support Consortium (InTASC) standards which stated what a beginning teacher needed to be able to know and do (Young et al., 2011); the goal of the standards was to "articulate a common core of teaching knowledge and skills that all new teachers should have and that

would be compatible with the standards for accomplished teaching set by National Board Teacher Standards" (CCSSO, 2010, p. 4). These were updated in 2010-2011 to reflect the premises that standards, not only need to be research-based but were intended for all teachers (not just beginning ones, CCSSO, 2010, 2011). Indeed, many states are tying their beginning teacher induction programs to these national teaching standards or creating their own and linking it to initial teacher licensing (Sweeny & DeBolt, 2000 as cited in Wang & Odell, 2002).

In addition to the above standards there are state induction and mentoring program frameworks (e.g., one to one mentor supports aligned with professional standards, Achinstein & Athanases, 2006a), state curriculum standards and state and local teaching standards (Olebe, 2005), as well as standards developed by an outside educational entity (e.g., ETS' Pathwise Induction Framework, Olebe, 2005). In addition to these induction and mentoring standards, there appears to be an additional standards requirement especially within the fields of science and mathematics: reform-based teaching standards (Wang & Odell, 2002) as delineated by national and state science and mathematics teaching standards (Wang & Odell, 2002). These reform-based standards and how they are being evidence in the mentoring relationship will be discussed later in this chapter. That being said, examination of how well-established state induction programs use standards is an important endeavor since it gives insight into how standards are guiding these induction and mentoring programs.

Well-Established State Induction Programs: Standards-in-Action

Despite the multitude of standards in induction and mentoring programs, a look at how some states have used in standards is needed. In this next section an examination of three state induction and mentoring programs will be conducted. California and Connecticut have a long history with the creation of mentoring programs and the use of standards to drive them. They are often touted as exemplary programs (Carver & Feiman-Nemser, 2009) and have been studied and written about in many peer reviewed journals. Although Connecticut has changed its induction program (it is now called Teacher Education and Mentoring Program, or TEAM) for the 2010-2011 school year, both states have programs legislated by the state government with the involvement of many state educational agencies. In addition, some of these programs, or at least some of the elements have been replicated by other states. For instance, under California's Beginning Teacher Support and Assessment program (BTSA) the administration of The New Teacher Center's mentoring program seems to have been emulated by several states (e.g., New York and Texas). Finally, an examination of the mentoring programs in Texas is warranted since that is the context for this study.

California

This state has had a state beginning teacher induction program since the early 1990s with the creation of the Beginning Teacher Support and Assessment program (BTSA, Carver & Feiman-Nemser, 2009; Olebe, 2001). There are several unique features of BTSA, such as 1) the number of state agencies and organizations that were involved in its development from California's Department of Education, California Commission on

Teacher Credentialing, to California's New Teacher Project and BTSA's legislative advisory panel and labor organizations (Carver & Feiman-Nemser, 2009; Olebe, 2001); 2) the amount of support that the district received from the state in regard to funding and supplying technical support and training for districts, around the program standards (Carver & Feiman-Nemser, 2009); 3) its incremental growth as a policy, allowing time for input and research to create policies before the program was put "into the field" (Olebe, 2001); 4) being mandatory for two years for all beginning teachers wishing to obtain for a professional cleared state teaching credential (though it began as a voluntary program, Olebe, 2001) and 5) the "embeddedness" of standards within its program and its development(Carver & Feiman-Nemser, 2009; Olebe, 2001). It is the latter feature that deserves a considerable amount of attention.

Standards are embedded within California's state induction program. First, there are the California Standards for the Teaching Profession, adopted in 1997 which give a common language and vision for teaching (California Commission on Teacher Credentialing and California Department of Education, 1997 as cited in Carver & Feiman-Nemser, 2009, p. 305). Second, the BTSA program standards were created to "help local officials design, implement, and evaluate well-designed and cost-efficient induction programs that included 'formative assessment, individual support, advanced study and frequent reflection on the practice of teaching'" (California Commission on Teacher Credentialing and California Department of Education, 1997, p. 3 as cited in Carver & Feiman-Nemser, 2009, p. 305). Third, the state developed a performance-based

assessment, called the California Formative Assessment and Support System which was aligned to the California teaching standards (Carver & Feiman-Nemser, 2009).

Finally, in 1997 induction became part of the teacher licensure program, alongside a 150 hour professional growth plan. During the first two years, beginning teachers received mentor support, guided by the formative assessments (Carver & Feiman-Nemser, 2009). Moreover, mentors received three days of state-approved training where they learn how to use the formative assessment tool and the state teaching standards (Carver & Feiman-Nemser, 2009). In addition, California also seems to have intentionally built into its state induction program variability (Feiman-Nemser et al., 1999). For instance, the implementation of BTSA under the Santa Cruz New Teacher Project, mentors are trained using the *Foundations of Mentoring* which included topics such as role of standards in evaluation of beginning teacher's practice, and building a trusting relationship (Carver & Feiman-Nemser, 2009). Thus, every step of the development of BTSA appears to have some set of standards embedded within its policies and implementation.

Connecticut

Like California, Connecticut's induction program goes back for two decades. However, part of its history was not only a careful examination on how beginning teachers were supported but also a complete transformation of how teachers were trained, certified and compensated, beginning in 1986 with the passage of the Education Enhancement Act(Carver & Feiman-Nemser, 2009; Youngs, 2007). The state created a three-tiered licensure program (beginning, provisional and professional) based on

standards (Youngs, 2007). Part of this transformation was the creation of the Beginning Educator Support and Training (BEST), a two year state induction program. BEST was comprised of two parts: the first year the beginning teacher received mentoring and second year the beginning teacher needed to conduct a performance-based portfolio assessment, a requirement for state teacher licensure (Carver & Feiman-Nemser, 2009).

The BEST framework was founded on two state-developed standards documents: the Common Core of Learning (CCL) and the Common Core of Teaching (CCT, Carver & Feiman-Nemser, 2009). CCL was "designed to work hand-in-hand with state curriculum frameworks to identify curricular goals for all grade levels in all subject areas" (Carver & Feiman-Nemser, 2009, p. 303); whereas the CCT was a tool designed to change how pre-service and experienced teachers were prepared and trained and play a role in beginning teacher induction (CSDE, 1999 as cited in Carver & Feiman-Nemser, 2009). Moreover, standards popped its head into the certification of these novice teachers since at the end of their second year, beginning teachers had to complete a state-assessed portfolio, one element in the Connecticut's state licensure process (Carver & Feiman-Nemser, 2009; Youngs, 2007). These portfolios were a culmination of an area of instruction, complete with a reflection on student and teacher learning; they were assessed through the use of CCL and CCT (Carver & Feiman-Nemser, 2009).

Moreover, like California the state is involved with the training of its mentors (Carver & Feiman-Nemser, 2009); this training consisted of (in 2000-2001) three days of BEST mentor training, covering topics such as instructional coaching, the use of reflection and support for the (second-year) portfolio (Youngs, 2007). Mentees also

received “content-specific” professional development which targeted teaching standards and portfolio development (Youngs, 2007). However, unlike California, the state and local school districts shared more equally the responsibility for the implementation of BEST. For instance, districts though required by the state to provide a BEST-trained mentor, school districts could “supplement” the state induction program (Carver & Feiman-Nemser, 2009).

Thus, these two states used standards throughout their state induction programs. Moreover, each programs had ties to teacher credentialing thereby creating (at least some) accountability for the professional development of its beginning teachers. The learning of the standards did not occur in isolation, rather there was professional development for the mentor to learn how to use the tools in which the teaching standards were embedded. In other words, there seems to be a comprehensive picture of how standards, its tools and accompanying professional development worked together to create a supportive mentoring environment for the novice teacher.

Texas

Texas is a unique state since it has created and implemented two distinct state induction and mentoring programs in a span of two decades: Texas Beginning Educator Support System (TxBESS) a beginning teacher induction program, governed by comprehensive list of program and performance standards (The Dana Center, 2002) and the Beginning Teacher Induction and Mentoring (BTIM), a mentoring program which are governed by Texas Education Code §21.458, which stipulates that the need for a mentor-mentee match, in regard to subject matter or grade level and school site and the use of a

state approved researched-based mentoring program (Texas Education Code §21.458). To help elucidate the differences between these two programs and how they came into existence, a brief history of TxBESS and BTIM is in order.

Texas Beginning Educator Support System (TxBESS). Texas has a twenty year history with policies governing comprehensive induction and mentoring programs for beginning teachers. Beginning in 1990 when the Texas Legislature permitted alternative certification pathways for prospective educators, mentoring was mandated for all of its alternatively trained teachers (ICF International, 2009; SEDL, 2000). By 1991 this program was extended to all beginning teachers (SEDL, 2000), yet it was a partially state funded mandate (SEDL, 2000). Consequently, the mandate needed to be funded through the district (ICF International, 2009) and the Texas State Board of Education Certification (SBEC) sought monies from the U.S. Department of Education to support this comprehensive induction program (The Dana Center, 2002; SEDL, 2000). TxBESS' goals were to increase beginning teacher retention and develop professional knowledge (The Dana Center, 2002; SEDL, 2000). In 1999 Texas began its state-wide half year pilot of TxBESS which was designed to give support to beginning public school teachers through instructional support, mentoring and formal assessment (Ingersoll & Kralik, 2004).

TxBESS was based on two standards documents: TxBESS Performance Standards (or TxBESS Framework) which was a list of twenty-two "interrelated proficiencies" that delineated what beginning teachers needed to know and be able to do and the TxBESS Program Standards which provided the "direction in program design,

organization, and context; strategies for the support and formative assessment of beginning teachers; and resources to operate and strengthen the program" (The Dana Center, 2002, pp. 3-4). A formative assessment tool called the TxBESS Activity Profile (TAP) was based on these performance standards which were created to "stimulate" conversation between the mentor and mentee and to "encourage" beginning teacher reflection (The Dana Center, 2002). All staff, including mentors, campus and district administrators and education service staff members were given training based on these standards (The Dana Center, 2002). However, despite this guidance from the standards, each education service center and school district could modify TxBESS to suit its local regional needs (ICF International, 2009; The Dana Center, 2002). Thus, variability was built into the system.

Thus, TxBESS was designed as a comprehensive support for the beginning teacher and training of its mentors. This included feedback from TAP; a support team for the beginning teacher, comprising the mentor, an administrator and a representative from teacher preparation entity; and training for the mentors as well as that for other school officials who used the TxBESS Activity Profile (TAP) to observe and assess the beginning teachers (SEDL, 2000). However, in 2003 when federal grant monies dried up, the Texas Workforce Commission and the U.S. Department of Labor gave three million to continue TxBESS (Eaton, 2010). TxBESS seemed to be a successful statewide induction program For instance, it had a higher retention of new teachers in comparison with non-TxBESS participants, especially in the retention of teachers of color and the improvement of beginning teacher classroom practice (The Dana Center, 2002) However,

despite this success after these federal and state funds stopped TxBESS ostensibly ended as well (Eaton, 2010).

Beginning Teacher Induction and Mentoring (BTIM). During the 80th Texas Legislature session in 2006, under Rider 73 funds were appropriated to create and support a new induction program called the Beginning Teacher Induction and Mentoring program (BTIM). Its goals were to retain beginning teachers, improve novice's instructional practice and improve student achievement. In addition, it provided for support and training of mentors and administrations (ICF International, 2009).This program was deemed necessary due to the high attrition rates of novice teachers, high rates of teachers teaching outside of their field and high rates of beginning teachers teaching in content area and geographical shortage areas (ICF International, 2009). BTIM is a grants - approved program in which districts and charter schools with the above characteristics were targeted. BTIM grantees however, do not need to use the same mentoring program but its chosen program must be approved by the state's education department, Texas Educational Agency (TEA, ICF International, 2009). Despite the flexibility on the mentoring program, BTIM grantees need to ensure that:

1) Mentors meet with their novices every week;
2) Mentors observe and assess the novice teacher, providing feedback on ways to improve;
3) Mentor and novice teacher developed improvement plans to meet professional standards; and

4) Mentors are supported by campus administration through regularly scheduled meetings (ICF International, 2009).

BTIM's requirements are quite minimal. For instance, as stipulated above there is no specific mandated mentoring program as long as the program meets TEA's approval (ICF International, 2009). BTIM provides for support and training of the mentor and administration, including professional development (ICF International, 2009) although BTIM funds cannot be used for administrator training (ICF International, 2009). Mentor teachers must have at least three complete years of teaching experience, have completed a TEA approved mentor and induction training program as well as a district-provided mentor training program. More importantly perhaps is that although there does not appear to be specific formal "standards" on what the mentor and mentee need to know and be able to do, there seems to be a framework that designates the roles of the mentor (e.g., observe and evaluate the mentee in the classroom), and the goals for program. From an informal interview with a TRC official working with BTIM, it was found that there are no evaluative performance standards for this program: the only information that needs to be reported to TEA in terms of accountability is the percentage of beginning teachers being retained.

BTIM is still in existence today. However, the entities that implement (i.e., determine what regions get BTIM support and coordinate professional development) are different depending on subject matter. For instance, for elementary and secondary mathematics and science teachers, the Texas Regional Collaboratives for Excellence in Science and Mathematics Teaching (TRC) based at the University of Texas at Austin has

been administering this program for the past four years. TRC which is funded by the TEA is a "state-wide network of sixty P-16 partnerships that provide sustained and high intensity professional development to P-12 teachers of science and mathematics across the state" (TRC, 2010, p. 1).

The comparison of how standards are evidenced within well-established programs is an important undertaking, but it is the effects of standards as a policy instrument have on the mentor-mentee relationship which give an indication if they are worthwhile tools. As will be noted, there are few empirical studies of induction and mentoring programs. Most empirical studies examine only if these programs are successful (or not) and do not analyze the success of particular components. In other words, an analysis of what is happening within the induction and mentoring programs that is causing the desired outcomes is needed. Standards when seen in the mentoring research seem to be concerned with not how they are influencing the mentor-mentee relationship but rather how reform-based standards such as though advocated by national science and mathematics organizations become actualized within the mentoring relationship.

Effects of Induction and Mentoring Programs on Beginning Teachers

There is limited empirical research into exploring the effects of particular components of induction and mentoring programs (Ingersoll & Strong, 2011; Wang et al., 2008) have on beginning teachers, mentors and their students. In particular, there is not much research that examines how these components affect the outcomes of teacher retention, student achievement and teacher knowledge (Ingersoll & Strong, 2011). Indeed, Ellen Moir, the New Teacher Center's Director penned in its Winter 2010

newsletter that there was a need for more studies that not only define but document the impact that induction programs were having on outcomes such as student engagement and increased student learning (Moir, 2010). Moir (2010) writes, "We must sharpen our focus, define a set of ambitious goals, and plot methods of vigorously measuring and validating progress" (p. 3). Within these studies even fewer look within the mathematics and science classroom context to see how these components affect the beginning teacher's practice. In this section an examination of how standards as a driver for teacher reform is (or is not) been felt within mentoring and induction programs will be undertaken.

Despite the hype that standards are intended to drive educational reform, it was found that not all mentoring programs appear to be structured to support such reform-based teaching (Wang et al.,2008; Wang & Odell, 2002). Reform-based teaching is teaching in ways that are endorsed by national teaching and learning standards such as NCTM. From the mentoring and induction research, there seem to be several reasons for teacher and student learning standards not being filtered down into the mentoring relationship: 1) "Conceptualizing" assumptions on the form and functions of mentoring; 2) expectations mismatch between learning standards-based learning and actual practice**;** and 3) mentor teachers not having the knowledge of teaching that support standards-based teaching, including the use of assessments and approaches to student learning (Knapp, 2003; Wang & Odell, 2002; Wang et al., 2008). Each of these reasons will be examined individually.

"Conceptualizing" Assumptions of the Form of the Mentoring Program

Odell and Wang (2002) in their comprehensive analysis of over 245 position papers, literature reviews, program evaluations and other reform documents on "mentored learning" within induction and mentoring program between 1980 and 2001 found three types of assumptions on mentoring that became conceptualized within induction and mentoring programs, none of which reinforced the standards-based (or reform-minded) ways of teaching. First, there was the humanistic perspective on mentoring; this mentoring perspective was concerned with the socialization of the novice into the teaching profession by providing emotional support. Mentors, under this assumption acted as counselors in which the skills of being a good listener and friend are paramount. Second, there was the situated apprentice perspective. In this case, the beginning teacher came to the profession with some teaching knowledge and skills but lacked the practical experience that the veteran teacher had. The mentor's role, therefore was to help the novice learn practical knowledge—the skills and techniques of teaching. Within this perspective, mentors were viewed as experts who exemplified good teaching and transmitted this knowledge through giving advice and suggestions to the struggling novice. Finally, there was the critical constructivist perspective. Within this perspective mentoring was seen as a way to help promote social justice through expressing their "dissatisfaction" with the current (teaching) knowledge. Consequently, the mentor-mentee relationship was focused on critiquing "existing knowledge and structures and the culture of teaching and schooling" (Wang & Odell, 2002, pp. 497-498) and not on using the standards.

All three of these assumptions of the roles in mentoring, according to Wang and Odell (2002) were not conducive to supporting standards-based teaching; the first two assumptions put the mentor in a reactive mode—the mentor reacted to the problems or issues brought up by the mentee. The critical constructivist approach did not take into account the need for principles and standards which "guide collaborative inquiry into teaching and make accountability possible" (p. 498); it challenged all knowledge even standards thereby creating an impossible feat since there must be some knowledge to make inquiry possible. In their final analysis of these three approaches Wang and Odell (2002) stated that the expectation that beginning teachers will learn from the standards cannot occur within a teacher mentoring program that uses one of the above perspectives as a foundation for its program. In order to get reformed-based teaching into the mentoring relationship, teacher mentoring needed to be "re-conceptualized" in which current assumptions and beliefs on mentoring were challenged and examined (Wang & Odell, 2002).

Expectations Mismatch: Context for Learning Standards-based Learning and Practice

Although standards-based reformers may believe that mentoring is a place where the novice teacher could learn how to teach using standards, mentors and mentees may not feel that this is the avenue through which this training should occur (Carver & Katz, 2004; Wang & Odell, 2002). Indeed, there appears to be a mismatch between what is expected from mentoring and what takes place within actual practice. Novices for instance, in some of the studies examined by Wang and Odell (2002) expected the mentor

to provide emotional and teaching support in which learning to teach was a process of trial and error on the part of the novice; mentors appeared to agree with this assumption and were often "hesitant to play an active role in supporting novices' learning to teach" (p. 511). Consequently, there appears to be a mismatch between the expectations of standards-based reformers and expectations of mentors and mentees towards the mentoring relationship. This prevailing norm that teachers do not challenge each other was also seen in the research of Carver and Katz (2004) in which a mentor teacher with novices "on the edge" of acceptable practice was unwilling to challenge and hold his beginning teachers accountable to state teaching standards (Carver & Katz, 2004). Thus, the mentoring relationship as a place for a beginning teacher to learn reform-based teaching was hampered due to pervasive images of the mentoring roles, held by both the mentor and mentee.

Mentor's and Mentee's Lack of Knowledge About Standards-based Teaching

As noted by Luft and Patterson (2002) if beginning teachers are expected to know how to create and implement standards-based lessons, they will need an induction program that supports this premise. In particular, if the expectations for science teachers are that they need the beliefs, knowledge and skills in conducting inquiry-based lessons, beginning teachers will need an induction program, solely for them to address this need (Luft & Patterson, 2002). This means that mentors either will need to know and use reformed-based teaching within their own practice or be given training and support into how to use these standards not only for their own practice but to help the novice to learn and practice these techniques as well. Moreover, it appears that if reform-based teaching

is to occur, the type of pre-service training of prospective science teachers needs to be addressed as well. In a study by Roehrig and Luft (2006) that examined the impact that science-focused (inquiry-based) induction program had on beginning science teachers from different preparation programs, it was found that their training influenced what they received from their induction program; teachers with extended student teaching experiences in inquiry-based instruction utilized their induction to critically discuss their lessons while those teachers with limited exposure to reform-based method (or no exposure) at all needed more time to learn these methods within the induction program (Roehrig & Luft, 2006). This lack of pedagogical science knowledge and experience using it seem to imply that induction program planners need to take into account the type of pre-service training that their novices bring to their schools.

Although these studies document how reform-based standards are being evidenced within the mentoring relationships, the above research does not examine how mentoring standards could help the mentor to mentor beginning teachers. In other words, the teaching standards discussed although important to instructional practice are external to what the mentor needs to be able to know and do within the mentoring relationship.

Factors that Impact Induction or Mentor Program Quality

The quality of the induction or mentoring program appear to be affected by many factors such as professional and cultural context of the school in which the mentoring occurs, the support of administrative staff, and policy components such as the funding of the program as well as if the program is mandatory or voluntary. Like standards, these

factors do not act in isolation but in combination with other (potential) influences on the mentoring program, thus a brief examination of each factor is warranted.

Cultural Context of the School and District

The match between reform-minded beginning teachers' beliefs and practices towards teaching and the school's and district's culture seemed to play a crucial role as these teachers attempted to use these reform methods in their classrooms (McGinnis, Parker & Graeber, 2004). McGinnis, Parker and Graeber (2004) conducted a two year study of five beginning mathematics and science teachers who had graduated from a reform-based undergraduate teacher education program that emphasized connections between mathematics and sciences as advocated by national mathematics and science professional organizations in elementary and middle school settings. These researchers found that "affordances" such as district workshops focused on the state's performance based assessments, district's curriculum that was supportive of reform-based teaching, and a supportive principal according to the beginning teachers seemed to have assisted them as they learned to teach. On the other hand, other cultural components such as "unsolicited" comments to change their practice, shortage of technology, the prescribed mathematics and science curriculum and experienced teachers' assumption that the beginning teacher's practice would become less active and innovative with time appeared to put stress on these reform-minded teachers. Indeed these teachers' primary need was to feel supported in their use of standards-based teaching within the school setting.

This research lends credence to the idea that though beginning teachers may have the capacity to teach in reform-based ways, the school environment plays a role in how

their instructional practices are valued by others within their schools and if these methods get actualized within the school. Indeed, "the potential coercive power over their work lives, are noticed by beginning teachers and influence their curricular, instructional and assessment actions" (p. 743).

Principal as Mentor Support in the School

Principals appear to play an important supportive role in the mentoring of beginning teachers (The Dana Center, 2002; McGinnis et al., 2004). Indeed, in surveys and interviews on the effectiveness of the Texas' comprehensive induction program in 2001-2002 beginning teachers and mentors cited the importance of having "effective" support from their principals. Principals supported mentoring programs through providing for release time, common planning time, and classrooms close to the mentors (The Dana Center, 2002). Consequently, it was advised that principals be trained on the mentoring program (The Dana Center, 2002). In a study of Alabama's statewide mentoring program principals were also identified by mentees as having an important impact on the quality of the mentoring. From an electronic survey of mentors and mentees from 2007 -2008 and focus groups of mentoring personnel, mentors and mentees, conducted in 2008-2009 on the implementation of the Alabama Teacher Mentoring program, it was found from district level mentor personnel that the success of the program was "highly" dependent on the principal's support and their selection of mentors for the program; from the mentors it was found that "more meaningful" mentoring was more likely to occur when the principal was supportive of the program. However, there were some challenges such as personality mismatches between the

mentor and mentee due to the principal's lack of knowledge about the beginning teacher's personality (Kent, Green & Feldman, 2010).

Funding

Within induction and mentoring research, funding is portrayed as a commonsensical need for quality mentoring program. For instance, with funding, it is assumed that there will be effective mentoring; without adequate funds, the effectiveness of the program is diminished. But the research is mixed in this regard, depending on beginning teacher characteristics and the specificity of state program guidelines. In an examination of the effect that funding had on the quality of mentoring programs Freemyer, Townsend, Freemyer and Baldwin (2010) looked at how financial support changed the quality of mentoring and on beginning teacher outcomes in the state of Indiana. In this case before 2005 mentors were paid a stipend to mentor beginning teachers but after this date, the funding ceased. These researchers found that mentors and mentees met significantly fewer times after 2005. This in turn according to Freemyer et al. (2010) influenced beginning teacher longevity and their effectiveness in the classroom.

Other research has discovered that state funding for induction has a counter-intuitive effect on the least experienced teachers: Funding seems to decrease the likelihood for a teacher with less pre-service training of having a mentor (Smith, 2007). Smith (2007) using the Schools and Staffing Survey (SASS) from 1999-2000 merged with state-level policy data compiled by *Education Week* for its annual "Quality *State Policy and New-Teacher Turnover* along with the Teacher Follow Up Survey from 2000-

2001 of over 2000 first year secondary and elementary teachers found that in a state mandated induction program there were greater odds of a beginning teacher having a mentor than not, holding certification status, the level of pre-service training and other school characteristics constant. Within the same scenario but in a funded program the odds of having a mentor although positive was not statistically significant for beginning teachers (Smith, 2007). In other words, funding did not seem to have a statistically significant effect of participating in a mentored relationship. Moreover, including the amount of pre-service training along with state funding into the equation appeared to decrease the likelihood that the beginning teacher will participated in a mentored relationship. In other words, in a funded program a novice with more pre-service training is more likely to have a mentor than one with less training (Smith, 2007). Therefore, funding appears to interact with other beginning teacher characteristics especially with the amount of training that they bring to the school.

Bartlett and Johnson (2009) concurred that funding though needed is not sufficient to guarantee quality induction programs; but a lack of funding can create inequities between high poverty and more affluent schools since the latter may be able to afford a quality induction and the former cannot. Bartlett and Johnson (2009) in their examination of three state induction policies in regard to state mandates (i.e., whether the induction is voluntary or not), funding, and specificity of the state program and its implementation at the district level found that these factors interact together in creating quality programs. A state with mandated induction policy but with no funding might have a difficult time providing induction for their beginning teachers, since they need to draw

their own resources to provide these services, thereby creating diversity among their programs. In a state with mandatory induction policy with funding but with some specific guidelines that define the program components tended to have more comprehensive programs, although there could also be great diversity among the various programs (Bartlett & Johnson, 2009). Like the previous research, other variables in this case, the amount of state specificity on induction program guidelines can play a role on the quality of the program for the mentee.

Mandatory or Voluntary Induction

In many cases if an induction or mentoring program is mandatory, it tends to be funded though this is not always the case. Wang et al. (2002) noted that in their examination of sixteen state induction or mentoring programs (in existence at the time in 2001) that funded mandatory state policies in general implied more restricted "inclusionary" criteria. For example, in Virginia to be eligible to receive induction a beginning teacher needed to be a full-time a teacher with less than one year of experience while in California induction is open to teachers with less than two years of experience but with unfunded mandatory policies states such as Michigan allowed teachers within the first three years into the induction program (Wang et al., 2002). In addition, if the program was mandatory there usually were state guidelines that "revealed a stronger state role in overseeing and implementing programs" and a "clearer" responsibility for states and districts (Wang et al., 2002, p. 6).

Thus, funding, in conjunction with whether the program is mandatory or not tends to play a role in whether a state induction program has standards or criteria for the

implementation of induction programs. Moreover, other contextual factors such as support from the principal and the environment in which the mentoring takes place have implications for the quality of the induction or mentoring programs. However, these contextual items within this research did not dive into how this environment, in particular mentor standards affect the mentor's capacity to mentor.

Needs and Challenges of Mentoring Beginning Teachers

Despite the effects that policy components such as funding and other contextual factors have on the quality of the mentoring, the needs and challenges of mentoring teachers need to be examined. For example, reform-based teaching needs appear to be more acute with mathematics and science teachers than with other subject areas, but these are not the only challenges for mentoring beginning teachers in these fields. Before exploring these challenges in more depth, the next section will look at how teacher turnover affects new teachers, in particular mathematics and science teachers and the effects that particular bundles of components within induction programs have on this turnover rate.

Beginning Teacher Turnover Rate

Induction and mentoring programs have often portrayed as one of the policy mechanisms in which to curb the problem of beginning teacher turnover (Ingersoll & Kralik, 2004; Smith, 2007; Smith & Ingersoll, 2004) and to help retain beginning teachers especially in shortage content areas and geographical areas with high turnover rates (See ICF International, 2009). However, it has been well documented that teacher shortage is essentially a problem of retaining non-retirement teachers (Ingersoll, 2001;

Ingersoll & Perda, 2009). Although teacher turnover occurs for a variety of reasons, these early departures are related to organizational conditions such as lack of teacher voice in school decisions (Ingersoll, 2001). This same phenomenon occurred with mathematics and science teachers. For instance, from a study of the turnover rate of secondary mathematics and science teachers, as gathered from the five cycles of Schools and Staffing survey and the Teacher Follow-up study from the late 1980s until the 2003-2004 school year it was found that although there was an adequate number of new mathematics and science teachers in the public school pipeline to replace those who had retired and left teaching, there was still a continual problem of retaining those who had entered the field (Ingersoll & Perda, 2009). For secondary mathematics and science teachers one of the statistically significant reasons for this turnover was job dissatisfaction. Inadequate preparation and lack of input in decision-making was cited by both content-area teachers as reasons for this dissatisfaction. Ingersoll and Perda (2009) concluded from their study that production and recruitment policies will not in and of themselves solve the teacher shortage problem; attention needed to be place on retention as well.

From 1990 to1991 about four out of ten beginning teachers participated in a formal induction program but by 1999 to2000 this number had doubled to eight out of ten novice teachers (Smith & Ingersoll, 2004). However, there are few empirical studies that have examined the effectiveness of these programs in terms of student achievement, teacher instructional practice and teacher retention (Ingersoll & Strong, 2011). Ingersoll and Kralik (2004) in their analysis of 150 empirical studies of induction and mentoring programs from the mid-1980s until 2004 found only ten of these studies used quantitative

data, evaluated these programs with clear verifiable outcomes of mentored beginning teachers and made comparisons between those who were mentored and those who were not. From this set of studies these researchers found that teacher mentoring programs had a positive effect, in regard to beginning teacher experiences and retention. In other words, induction appeared to matter.

Induction and Mentoring Components and Beginning Teacher Turnover

The relationship between components of induction and mentoring programs and its effects on beginning teachers (Ingersoll & Strong, 2010) and mentors are under-studied. However, there have been some studies examining these relationships especially in regard to teacher turnover. For instance, using the Schools and Staffing Survey (SASS) and the Teacher Follow up Survey (TFS) from 1999-2000 and 2000-2001cycle with over 50,000 elementary and secondary teachers researchers found that mentoring supports for the mentee matters (Ingersoll & Smith, 2004; Smith & Ingersoll, 2004). Beginning teachers who received mentor supports such as having a mentor in the same content area, sharing a common planning period with teachers in the same field, having regular collaboration sessions with other teachers as well as being a member of a network of teachers were not as likely to leave their school at the end of the first year than teachers receiving other types of support; however, these researchers noted that these supports did not happen isolation. Indeed, bundles of supports, that is to say receiving more than one type of mentoring support had a statistically significant effect on beginning teacher retention (Ingersoll & Smith, 2004). Indeed, Smith and Ingersoll (2004) showed that three types of bundles or induction "packages" had differing effects on beginning

teachers' retention rates. These packages ranged from no induction, to basic induction package which had two induction components to a package with the greatest amount of mentoring supports (i.e., basic induction plus collaboration, teacher network and "extra" resources). The bundle that had the highest number of supports had higher beginning teacher retention rates.

This research however, does not look into other factors such as the intensity, duration, or structure of the induction programs that may play an effect on the strength of these induction packages (Smith & Ingersoll, 2004). In other words, an induction program may contain a certain component but how this support is actually constructed or for how long are some of the unanswered questions. Moreover, this research cannot examine how teacher factors may have played a role in retention or even if self-selection could have accounted for some of the differences with the different induction packages. More importantly perhaps is that large national data sets though important to look at may gloss over some of the real differences within the examined induction and mentoring programs.

Challenges for Math and Science Teachers: Possible Ramifications for Mentoring

Although secondary mathematics and science teachers tend to be lumped together into one monolithic group, there are some important distinctions, dictated by national and state standards-reform policies. First, with passage of NCLB of 2001, all teachers must be "high quality". Teachers, including science and mathematics must have a bachelor's degree as well as full state licensure and demonstration of content area knowledge of the subject that the prospective teacher will teach (NCLB, 2001). With secondary science

teachers, this requirement is even more stringent than in the more generalist secondary mathematics teachers since secondary science is divided into areas such as earth and physical science. To teach physics, for example the teacher needs to have a certificate in physics; in chemistry the teacher needs a chemistry certificate and so forth. This means less flexibility in terms of school scheduling since a certified secondary biology teacher cannot teach physics (unless he or she has the appropriate licensure). Therefore, there might be more difficulty in finding a certified science teacher in a particular field than finding the more generalist secondary mathematics teacher.

Under the reform-based or standards-based reform, both science and mathematics students and teachers are governed by standards. Although professional teaching standards are voluntary such as those from the National Council of the Teachers of Mathematics (NCTM, Reys, Reys, Lapan & Holliday, 2003) and those from the National Research Council (NRC, Smith, Desimone, Zeidner, Dunn, Bhatt & Rumyantseva, 2007) they seemed to have spurred the creation of mandatory state content area and teaching standards. These standards mark a significant departure in the way students are to learn and teachers are to teach science and mathematics. For instance, in science whereas in the past students may have only had to record information and memorize scientific facts and formulae (Cohen & Spillane, 1992), now they have to be able to use inquiry-based learning (Smith et al., 2007). For the science teacher, this has meant that secondary science teacher must be able to teach using inquiry-oriented instruction (Bradbury, 2010; Smith et al., 2007) in which the teacher models the scientific method.

In mathematics, a similar occurrence has taken place in which mathematics students are no longer just taught the algorithms but are expected to know how to take mathematics knowledge and apply it to novel situations. Moreover, the focus within the reform-minded mathematics classroom is the involvement of mathematics students in their learning by actively making sense of mathematics by incorporating their experiences and knowledge (Cobb, 1994 as cited in Wang & Paine, 2001; Noddings, 1985 as cited in Wang & Paine, 2001)

In this section, an examination of how the standards-based movement has trickled down into secondary science and mathematics will be discussed in particular how this movement has or has not impacted the mentoring relationship. Indeed, mentoring has been seen as a method of reform –to change the instructional practices of teachers in some cases in situations that are contrary to prevailing practice (Wang & Paine, 2001). That being said, although there was quite a bit of research concerning mathematics teaching reform and the change of instructional practice especially in the 1990s and early 2000s (Cohen & Ball, 1990; Cohen & Hill, 2000) especially in California, and teacher content knowledge (Hill, Schilling, & Ball, 2004), it seems within the research standards-based reform in conjunction with induction program is more of a concern with science educators than mathematics educators. Mathematics educators appear to be concerned with how to define "good" teaching or teaching as a practice (e.g., Ball & Forzani, 2009, 2010) and how to make mathematics teaching more equitable for all children (e.g., Richardson, 2009). On the other hand, more science teacher educators appear to be

looking at what content-specific mentoring should look like and its impact on beginning science teacher practices.

Beginning science teachers. Within the induction and mentoring literature for beginning science teachers there seems to be a concern for standards-based reform, that is to say how the use of inquiry-based methods is being evidenced within the science classroom (Bradbury, 2010; Davis, Petish & Smithey, 2006) in science-specific mentoring arrangements (Bradbury, 2010; Luft et al., 2003). Indeed there has been a demand for science educators for induction and mentoring programs to reflect the standards-based teaching methods. For instance, Bradbury(2010) calls for a change from the more traditional type of mentoring in which the emphasis is on retaining the teacher by supporting the beginning teacher through offering practical advice and providing copies of lessons plans and science activities to an "educative mentoring" model as championed and exemplified in the work of Feiman-Nemser (2001b).

Educative mentoring in the science context implies that mentoring must foster an inquiry-based disposition towards science teaching and learning, as depicted by the standards; the mentor while meeting the short-term needs of her mentee is also aware of developing the long-term orientation towards standards-based teaching in which the students' background knowledge serves as a starting point for lesson planning and supporting student learning (Bradbury, 2010). Moreover, the mentor would respect the development level of the beginning teacher, while getting the beginning teacher to deconstruct their teaching and learning beliefs and reflect on their teaching. In addition, mentoring is situated within a real classroom where the mentor takes an analytic stance

towards teaching in which the mentor also sees herself as a learner. Standards are evidenced when the mentor models standards-based teaching for the novice; however, for this model of mentoring to work, the science mentor must know the National Science and Education Standards and the Benchmarks for Scientific literacy which in turn may mean that the science teacher will need professional development that "provides the context for increasing their knowledge of the science standards" (Bradbury, 2010, p. 1062). However, there still needs to be research on the types of supports that mentors will need to "enact" educative mentoring in the science-based induction programs as well as research on which factors of school context plays a role in the success of this type of standards-based mentoring (Bradbury, 2010). As of now, the idea of reform-based educative mentoring appears to be more conceptual than a realized phenomenon in most mentoring and induction programs.

There have been a few studies of induction and mentoring components within science classroom that have yielded some interesting results especially in regard to the effects of content-specific induction and teacher preparation on the use of inquiry-based instruction (as touted by national science standards). Luft et al. (2003) studied the effects of a content-focused induction had on eighteen beginning 6^{th} through 8^{th} grade science teachers' practices, beliefs and experiences: six received induction via a university-based science-based support program, another six received general support programs from the school district and the final group had no access to an induction program. The authors discovered that those beginning teachers with one to three years of experience in either a content-focused or general-focus induction program were more likely to use standards-

based lessons than those novices not receiving induction. However, between these two groups Luft et al (2003) found that beginning teachers in the science-focused induction not only had more conceptual and constructivist beliefs but also used more inquiry, student-centered and standards-based lessons than the general-focused induction teachers.

Moreover, it appears that the effects of induction programs may be influenced by the types of teacher preparation that the beginning teacher brings to the program (Roehrig & Luft, 2006). Roehrig and Luft (2006) studied 16 beginning secondary science teachers over two years: Four from a Master's of Education degree with a science emphasis, four with an undergraduate degree (K- 8) with an elementary education licensure, four with an undergraduate (7-12) with a traditional science licensure, and four alternatively certified candidates. All teachers received the same inquiry-based induction program which emphasized specific supports for science teachers which attempts to "bridge the gap" between their schooling and the beginning years in the science classroom. Roehrig and Luft (2006) examined both the beginning teachers' beliefs and teaching practices. These authors found that those with beliefs that matched reform-based teaching, naming the use of inquiry in the classroom as dictated by the standards performed more inquiry-based lessons though only six of out of these eleven teachers truly implemented lessons that met the national standards. The ability to create inquiry-based lessons broke down according to teacher preparation type: Those with a M.Ed. with a science emphasis could create and implement their own inquiry lessons throughout the school year while the other beginning teachers needed assistance from the induction program to attempt this type of lesson. The researchers noted that instructional support appeared to be "critical" for the

elementary certified and the alternatively certified teachers since they had either science methods courses designed for elementary grades or no science methods courses at all (Roehrig & Luft,2006) . Thus, one of the challenges for the mentoring of science teachers is the effect that the amount and practice of pedagogy knowledge may have on how beginning teachers' access programmatic supports.

Beginning mathematics teachers. To support beginning mathematics teachers in learning how to teach in reform-based ways, it is advantageous to have a mentor who not only knows these methods but is supportive of the novice as she builds upon her teaching knowledge. However, there are challenges within the mentoring relationship when the mentor is to mentor the novice into the reform-based modes of practice that are different from the dominant prevailing practices within the school context. For instance, Wang and Paine (2001) found in their study of a Chinese mentor and her first-grade novice teacher during her first year of teaching that the mentee was able to change her thinking and teaching of mathematics through the carefully structured and thought-out plans of her mentor; the mentor's focus was always the same: to help the novice to learn the "fundamental" features of an active and student-focused curriculum. Moreover, this mentor gradually raised her standards and changed her goals for her mentee as the beginning teacher gained more confidence and experience in teaching in reform-minded ways. Although many teachers in the school still continued to teach in more traditional ways, Wang and Paine (2001) discovered that the mentor's concerted effort through modeling, analyzing and reflecting on her practice appeared to override this context of prevailing instructional practice.

Consequently, the studies concerning science and math-specific induction and their effects on the mentoring relationship and the instructional practices for the beginning teacher although important, do not delve into how the mentor in her role as instructional (reform) guide is supported as she learns to mentor beginning mathematics and science teachers. In particular, there seems to be a lack of analysis on what is guiding and supporting the mentor. Although there appear to be external standards, namely content specific standards, there is no examination of the internal standards in learning to mentor.

Finally, before looking at the conceptual framework and evaluative studies of induction and mentoring programs, the needs of the mentor need to be examined. Since part of Cohen and Moffitt's policy implementation framework looks at capability and the aim of this study is to explore the effects of mentoring standards, a brief overview of some of the expectations in regard to mentor knowledge, roles and supports is needed.

Needs and Supports of Mentors

Although much of the mentoring and induction research seems to be focused on the needs and supports of the beginning teacher as she becomes socialized into teaching and learns how to teach in a particular ways in specific contexts, to build mentor capacity means to explore what knowledge the mentor needs to mentor novice teachers, as well as the roles and the supports that she needs to grow and learn as a mentor and a teaching professional. These three areas will be examined separately.

Mentor's Knowledge

According to Achinstein and Athanases (2006a) the mentor needs to have a "bi-focal" perspective on teachers and learners; the mentor needs to know not only how to work with students in the classroom but also with an adult learner, the beginning teacher. These are different skills that draw upon different knowledge bases. Moreover, the mentor must know the content and grade level standards and be able to align this knowledge to curriculum (Achinstein & Athanases, 2006a). The mentor must know and be able to use a wide variety of assessments with students as well as being able to assess the beginning the teacher as she develops her skills. Observing and rating the novice is not enough, the mentor must be able to conduct "learner-focused" conversations, augmented with data with the beginning teacher (Athanases & Achinstein, 2003). Feiman-Nemser (2001b) broke down these conversational skills that she saw in an exemplar mentor into six areas: 1) Having productive conversations with the mentee, by looking for "openings" to discuss issues salient to the beginning teacher but important to teacher development; 2) pinpointing and having the mentee pinpoint problems with their teaching; 3) probing the novice teacher's thinking through open-ended questions (e.g., what mentee meant by a particular phrase or word); 4) giving compliments and acknowledging growth in the mentee to the beginning teacher; 5) focusing on the mentee's students, observed in the beginning teacher's classroom; and 6) reinforcing learning theory in the context of the classroom thereby making connections between theory and practice.

Understanding the political environment of the school is also a desired skill for the mentor (Achinstein, 2006). Achinstein (2006) calls this ability "political literacy" since the mentor will need to help the beginning teacher to "navigate" the school and district cultures by advocating on behalf of the mentee and teaching her this "political knowledge" (Achinstein, 2006). For instance, the mentor might help a teacher negotiate with the principal the curriculum that the mentee would use in class in place of the mandated program. Finally, mentors need a "repertoire of clean and useable mentoring strategies, grounded in professional teaching strategies that can be used to gather formative data on novice teaching practice" (Carver & Katz, 2004, p. 460). This includes the mentor having the opportunity to learn how to use mentoring "tools" to aid in the beginning teacher's professional development (Carver & Katz, 2004). Despite this litany of knowledge that mentors need to know to mentor there seems to be limited research, looking into what mechanisms are used to filter this information down to the mentee and then, finally down to the mentee's students.

Mentor Roles

The roles that the mentor plays in the mentor relationship often depend on the goals of the program and in which context the role is defined. For instance, a mentor can be a local guide (Achinstein & Athanases, 2006a; Feiman-Nemser & Parker, 1992; Ingersoll & Smith, 2004), an educational companion, a (reform) change agent (Feiman-Nemser & Parker, 1992), emotional supporter (Achinstein & Athanases, 2006a) or evaluator (Yusko & Feiman-Nemser, 2008). These roles are often defined by state and district policy (Carver & Feiman-Nemser, 2009).

The first role and the one that encompasses all the other roles is the mentor as "agent of induction policy" or as "policy broker" (Carver & Feiman-Nemser, 2009). Mentors bring mentoring policies "to life" since they determine how and if the policy will be implemented. But mentoring does not occur in isolation so induction and mentoring policy must address the working conditions and the opportunities that mentors have to learn how to mentor. If policy makers expect mentors to follow mentoring and induction policy, mentors will need to be given opportunities to learn to mentor "in ways that fit the intentions of the policy" (Carver & Feiman-Nemser, 2009, p. 316). For instance, if policymakers plan to affect the instructional practice of the mentee through mentoring practice, the mentor teacher might need to learn how to use a formative or summative assessment to evaluate the beginning teacher.

For standards-based reformers, the mentor is seen as someone who is a model of teaching "reform-based" teaching (Wang & Odell, 2002); the mentor, in this case knows and is able to use standards in their practice (and teaches in reform-based ways). More importantly, perhaps is that mentors must be able to "support novices in posing problems for current teaching practice, uncovering the assumptions underlying current practice and constructing and reconstructing the curriculum and teaching practice in the unique context of teaching" (Wang & Odell, 2002, p. 489). Therefore, policy's role definition and training are inherently linked.

Moreover, the capability that the mentor brings to the mentoring also defines what the mentor is able to do; however, like the agent of induction, this part is dependent on training. For instance, Feiman-Nemser (2001b) discusses not only the strategies that her

exemplar mentor teacher, Pete Frazer used to mentor but also how he learned to mentor. Educative mentoring relies on the knowledge and practice of "good" teaching and teacher learning in which the mentor takes an inquiry stance to help the mentee to learn to be reflective on her teaching. With the educative mentoring context, the mentors learn to "use their knowledge and expertise to assess the direction novices are heading and to create opportunities and conditions that support meaningful teacher learning in the service of student learning" (p. 18). More importantly is that Pete learned to mentor with the supports, similar to those offered to mentees.

However, contradictory roles may not yield the intended results. For instance, if the mentor needs to assess the beginning teacher in regard to continual employment within a school, her role might be considered (by the mentee) as a role of assessor and not as an assistant or someone to help the beginning teacher to develop professionally. These contradictory roles may have implications for the type of relationship that can develop between the beginning teacher and mentor (Yusko & Feiman-Nemser, 2008).

Supports for Mentors

The primary support for mentors is on-going mentor training and development. This training could incorporate the use of mentoring case studies (Feiman-Nemser, 2001b), mentors helping mentors (Feiman-Nemser, 2001b) and the use of cultural tools (Koaballa, Kittleson, Bradbury & Dias, 2010) to aid in mentor development. Moreover, mentors need time to learn how to mentor (Carver & Feiman-Nemser, 2009) as well as having administrative support (The Dana Center, 2002; Kent et al., 2010) and money as an incentive to provide quality mentoring (Freemyer et al., 2010). Supports appear to play

an important role in mentoring quality especially as perceived by the mentees and mentors. Indeed, one could argue that these supports like standards are policy instruments designed to change teacher quality. But like other mentoring literature there tends not to be studies that examine how policy instruments affect the induction and mentoring program.

Evaluative Studies of Induction Programs

The study of the factors and the components and their effects on beginning teachers as examined in this chapter give a feel for what is known and not known about induction and mentoring programs. But to discover what components appear to work, there is a need to discover what induction and mentoring programs work (or do not work). Well-established state induction and mentoring programs such as California's BTSA and Connecticut's BEST have been well researched (e.g., Glazerman, Dolfin, Bleeker, Johnson, Isenberg, Lugo-Gil, Grider, Britton & Ali, 2008) or used as exemplars of successful induction programs (e.g., AASCU, 2006; Carver & Feiman-Nemser, 2009). They have been used to examine state or district policies that support induction programs (e.g., Carver & Feiman-Nemser, 2009) as well as studies which examine particular components with them (e.g., California's BTSA's formative assessments, Thompson, Paek, Goe, & Ponte, 2004). There have been several program evaluations of induction and mentoring programs. Usually the outcomes are related to student achievement, teacher knowledge and teacher retention. In this section an examination of one state, Texas and its two mentoring programs will be scrutinized: TxBESS, a comprehensive program and BTIM, a mentoring program designed for beginning teachers. Then, two

other program types will be examined; one district and the other a comparative study between a national testing company's induction program and well-established induction program in California.

Texas: TxBESS and BTIM and Other Mentoring Programs

Texas has had two statewide induction and mentoring programs over the last two decades: Texas Beginning Educator Support System (TxBESS) and Beginning Teacher Induction and Mentoring (BTIM); both have been the subject of evaluative studies. However, despite the fact that some school districts are still using the mentoring component of TxBESS, this comprehensive induction program has not been extensively used since the early 2000s due to a lack of funding (Eaton, 2010). BTIM, on the other hand has essentially replaced this comprehensive induction program in 2007 (ICF International, 2009). Moreover, under BTIM school districts may choose any "research-based" mentoring program such as mentoring component of TxBESS, or Mentoring Texas, a program offered by Texas Regional Collaborative (TRC) to mathematics and science mentor trainers. In addition, though mentoring of beginning teachers is required in the state of Texas, more than half the school districts do not offer these programs (TBEC, 2009 as cited in Eaton, 2010).

In 2000 Southwest Educational Development Laboratory (SEDL) conducted a case study of three districts in Texas that self-described their mentoring programs as "well-established" or "successful." One of the districts was one of the largest urban school districts in the state with a 60% non-white student body in which 50% qualified for free or reduced lunch; another was a mid-city school district with 60% of its student

population characterized as non-white; and the third district was a county-wide district with same percentage of non-white as mid-city district but more than half of the students were "economically disadvantaged." State policy at the time did not provide much direction for mentoring programs especially in regard to the expectations for schools offering induction programs; moreover, there was no state funding—only some federal money for the implementation of TxBESS for a few years (SEDL, 2000). Some of the schools within these studied districts had either used or piloted TxBESS but none had used TxBESS district-wide. First year teachers within these districts are often in highly diverse (where more than 55% of student population was non-white) and low performing schools. Attrition rates for beginning teachers were in these schools and at the middle school level in comparison to the other school levels (SEDL, 2000). Consequently, according to these researchers there might be a need to constantly induct new and inexperienced teachers in these schools; moreover, the schools may experience challenges in creating collaborative cultures that support the novice teachers due to the higher turnover of beginning teachers.

However, a mentoring program must be analyzed within the context of the school district. In SEDL's (2000) study each district had different implementation results based on the governing approach to the mentoring program (e.g., decentralized or centralized), who controlled the mentoring program, the amount of information that that the district had collected (e.g., the number of new teachers in the district), whether the mentors were paid (or it was a voluntary position) and the length of time, developing and implementing a mentor program. The urban-district appeared to have the most trouble with the

implementation of a cohesive program since the mentor program was decentralized and the professional development staff was too small to implement a district-wide mentoring program. There was also a lack of information about the number of beginning teachers and where these teachers were located within the district. Though four schools (out of more than 100) were participating in TxBESS through the Regional Education Service Center, most mentors were voluntary and trained via the train-the-trainer model by the district's Office of Education Development. SEDL (2000) painted a rosy future report for the district since the district had implemented a program to support teachers getting their National Board of Professional Teaching Standards certification and 60 campuses had instructional specialists or non-teaching staff members for instructional improvement and teacher support.

The county-wide district had some similar challenges as urban school district in the implementation of the mentoring program. The mentoring program was decentralized and the responsibility for the mentoring program exchanged hands multiple times over the course of eight years. Although there were several innovations piloted in this district, few seemed to have worked well. In particular the novice teacher program was deemed unsuccessful since the quality of the program depended on graduate students to coordinate and conduct the meetings with the teachers across schools. In addition, a "grow-your-own" program was discontinued since a program evaluation deemed it a poor use of money. Like the urban school district, SEDL's report sees that the district is going the right way since it was at the time piloting a TxBESS program.

Finally, the mid-city independent school district seemed to have the most success in terms of implementation of mentoring programs. Indeed, it had a well-established district mentoring program that had evolved over fifteen years. The new teacher induction program provides funding for the mentees (who remain with the district and participate in additional training) and mentors, and a training manual for mentors as well as half-day of mentor training. Moreover, the district evaluates its mentor program on a yearly basis in which the district takes action. Within this study, it was seen that the capacity of the institution (i.e., the district) plays an important role in the implementation of an induction program, not matter how comprehensive the program may be.

The Charles A. Dana Center (2002) prepared an evaluation report on TxBESS for the State Board for Educator Certification. Using data from 1999-2000 to 2001-2002 academic years, The Dana Center surveyed beginning teachers, mentors, principals, representatives from teacher preparation entities and regional TxBESS coordinators and interviews with program participants of five of the twenty education service center; it looked at six questions of which four will be examined: Retention rates of beginning teachers, the identification of formal support systems for beginning teachers, the perceived effectiveness of the TAP and the relationship between student performance and teacher characteristics. It was found that beginning teacher participants of TxBESS had higher retention rates than non-TxBESS participants, particularly for high teachers and minority teachers; from cohort one 84% of TxBESS participants versus 75% of non-TxBESS teachers returned for their third year and from cohort two 87% of African American and 91% of Hispanic TxBESS participants versus 77% and 73% of non-

TxBESS participants returned for their second year. Mentors reported that the mentoring experience positively affected their professional growth through the observation and coaching process given to beginning teachers. Targeted training on novice teacher development, mentoring strategies and the use of TAP were highly rated activities. Moreover, beginning teachers reported more satisfaction with the mentoring when the program used supports such as common planning times, closeness of classrooms and similar teaching assignments between the mentor and mentee (The Dana Center, 2002). Despite the success of the program, The Dana Center (2002) reported that only about 10% of beginning teachers received TxBESS in the 2001-2002 school year. More importantly, only about 35% of principals who responded to the survey responded that they would not be able to give the same amount of beginning teacher support without TxBESS (The Dana Center, 2002). ICF International conducted an evaluative study of BTIM in 2009. Although this was mixed study, most of the information appeared to be perceptual via the perspectives of the mentor, mentee or school administrators with some data on retention rates and student achievement. Moreover, this information was gathered at one point in time, during the first year cycle. From on-line surveys of administrators, mentors, and beginning teachers and public data (e.g., how students performed on TAKS) ICF international examined the effectiveness of the first cycle of BTIM from 2007-2008 academic year. Namely, ICF International looked at five elements of which three will be examined: Retention of beginning teachers, quality of the match between mentors and beginning teachers and how this might influence student outcomes, and a description and evaluation of how mentors are trained, supported and selected (ICF International, 2009).

Based on information from administrators it was found that mentors were chosen based on such skills as the ability to work collaboratively, the ability to model "best practices" and "good" communication skills but did not rank teaching the same subject as the mentee as a "key" component (ICF International, 2009) although on site visits, both mentors and mentees thought this match was important. Most mentors (over 75%) thought their training was either "excellent" or "good". Within the mentor-mentee relationship, over half of mentors and beginning teachers described their relationship as "excellent" in which mentors helped the beginning teachers to develop professional skills by providing feedback (97% of mentors and 85% of mentees) and help with lesson planning (74% of mentors and 62% of novice teachers).

According to administrator surveys, most campus officials reported that BTIM helped with the retention of beginning teachers and "indirectly" with student achievement and classroom management (ICF International, 2009). However, BTIM retention rate for beginning teachers who stayed in the district (84%) was similar (85%) to state retention rate of all teachers (not just beginning teachers); since BTIM targeted those districts with high turnover rates, this information was interpreted as an indicator of the impact the BTIM was having. As for student achievement, students in middle schools in the BTIM program were less likely to pass the standards in TAKS reading than non-participation BTIM campuses; BTIM elementary schools as well were less likely to pass the TAKS reading. ICF International researchers caution making judgments based on these results since BTIM campuses may have chosen to participate since their student performance was low (ICF International, 2009).

District: Chicago Public Schools' Induction Program

There have been at least two evaluative studies on induction programs in the Chicago Public School System (CPS); these programs work in tandem with the GOLDEN Teachers Program, a mandated program for all first and second year teachers; the GOLDEN program pairs beginning teachers with an on-site mentor and fifteen hours of professional development for the novice (Kapadia, Coca & Easton, 2007). These induction programs, using a wide variety of models operated in different parts of the city; there were six induction programs at the elementary level, including one from Teach for America but only three induction programs at the secondary level (Kapadia et al., 2007). In the spring of 2005 the Consortium on Chicago Public School Research (CCSR) sent a survey to CPS elementary and high school beginning teachers in their first and second year of teaching to examine the effectiveness of these induction programs, in regard to their teaching experience, their intention to continue teaching and to stay in the same school (Kapadia et al., 2007). These authors found that a higher percentage of novices at both the elementary and high school levels that were inducted plan to remain in the same school than their non-inducted counterparts. Moreover, at the high school level a higher percentage of inductees planned to continue teaching (Kapadia et al., 2007). More importantly perhaps, Kapadia et al. (2007) discovered that a welcoming faculty in conjunction with "strong" leadership were the two strongest influences on the beginning teacher reporting that she had a good teaching experience and had plans to continue teaching. However, it should be noted that this information was based on the novices' perceptions; although it is important to include these perceptions within a study, it might

have lend more credence to the strength of the mentoring program if other outcomes such as instructional practice were also analyzed especially in regard to Ingersoll's (2001) study and the fact that some retention within an organization is desirable.

Mathematica's Study of Two Well-Regarded Mentoring Programs

Mathematica Policy Research, Inc. researched the "comprehensive" induction programs of University of California—Santa Cruz's New Teacher Center and ETS' Pathwise Induction program in 418 elementary schools in 17 districts within 13 states; each district had at least 50 percent of their student bodies qualified for free and reduced lunch. These researchers found from their randomized control study that neither ETS nor NTP (called the New Teacher Center in their paper) programs had a significant impact on teacher practices (e.g., content of lesson, classroom culture), teacher retention, or student achievement across all grades in mathematics and reading after one year of implementation (Glazerman et al., 2008). However, in 2009 Mathematica continued their study; they found more or less the same findings: No statistically significant impact on teacher retention and student achievement (Isenberg, Glazer, Bleeker, Johnson, Lugo-Gil, Grider & Dolfin, 2009). However, researchers such as Ingersoll and Strong (2011) lambasted these reports since they were not studies of inductees versus non-inductees since the schools in the study had already formal induction programs in place. Therefore, the study was a comparison between differing types of induction. Moreover, there may have been some in-school variability not accounted for in the study since the principals controlled where the money went, thereby affecting the intensity of the program; therefore, when the researchers interviewed district administrators and superintendents

they may not have known about these differences. More importantly perhaps is that these researchers did not find out why the induction was not successful (Ingersoll & Strong, 2011).

Although evaluative programs are needed to judge the effectiveness of induction and mentoring programs, including their cost effectiveness, they often fail to discover why a program is "good" (i.e., yields good results such as higher teacher retention) or "bad" (i.e., yields the same results as not having a program in place). Policymakers and the public want to know if the program is cost effective but evaluative programs, like other research must be read carefully to see what they are measuring (i.e., the outcomes) and how they are measuring these outcomes (e.g., asking for mentee's perception). Moreover, these studies do not examine how particular policy instruments, such as mentoring standards are helping (or impeding) the mentor as she learns to mentor. That being said, the context in which the mentoring takes place, in particular institutional capacity seemed to aid in the successful implementation of an induction or mentoring program.

Revisiting the Literature

Mentoring studies have been deficient on several counts. First, there appears to be few studies on the influence that induction and mentoring standards have on the mentor-mentee relationship. For instance, although other researchers (Carver & Feiman-Nemser, 2009) have found that state or district-based teacher standards as policy instruments played a role in the quality of mentoring they did not look at how mentoring standards as a policy instrument influenced the mentor-mentee relationship. Moreover, there is

limited discussion about how standards are learned by the mentor and beginning teacher (e.g., what happens if the mentor or beginning teacher is not knowledgeable about the standards). Second, few of these studies focus on the mathematics and science classroom especially at the middle school level. More importantly perhaps is that there is a paucity of studies which examine the mentor-mentee relationship within the high poverty school context even though it is well documented that many beginning teachers in these school settings leave the profession within the first three to five years. Finally, there are some methodological shortcomings of previous studies. For example, most evaluative studies failed to look at the components within "successful" induction and mentoring (Ingersoll & Strong, 2011). In addition, induction and mentoring studies tend to be perceptual in nature (Hobson et al., 2009), usually focused on the mentee's perspective and experience thereby highlighting the beginning teacher needs (not the mentor's).

This qualitative study bridges these gaps by examining how mentoring standards, as a policy instrument influence the mentor-mentee relationship in high poverty middle schools from two viewpoints: the mentors' and mentees' perspectives or bottom-up perspective and from the policy system standpoint or top-down perspective (see Spillane, 2004). For the bottom-up perspective, this study takes into account how the mentor and mentee role definitions are understood and enacted by the mentors and mentees. For the policy system perspective, I examine how mentoring standards fit with the policy elements, described in Cohen and Moffitt's (2009) policy implementation framework since standards do not work in isolation rather they work in tandem with the mentoring policy aims, capacity and capability of the mentors and the mentees and the environment.

Mentoring standards also work with other policy instruments such as mentor initial training and support. Specifically, this study will examine, using Cohen and Moffitt's (2009) implementation framework how the aims of the mentoring policy, the mentor's and mentee's capacity and capability, mentoring standards and other policy instruments and the environment interact under one state's mentoring program.

Conceptual Framework

Policy instruments such as standards do not function in isolation. They need knowledgeable people to use and implement them; in some cases people in educational spheres will need to learn a lot and unlearn "what they thought they knew" (Cohen & Moffitt, 2009, p. 222). In other words, standards need to be operationalized at differing governing levels from the state down to the classroom (Bianchini & Kelly, 2002). In addition, as this literature has shown context especially cultural context of the schools in which the mentoring transpires has ramifications for the quality of the mentoring (e.g., Johnson et al., 2004; Kardos & Johnson, 2007). To bridge this cultural context gap and give a more comprehensive picture of how standards are impacting a mentor's capacity to mentor David Cohen's and Susan Moffitt's (2009) framework on policy implementation will be utilized.

Figure 1 shows how the skills, knowledge and disposition of both the mentor and mentee interact within the school context which is comprised of the aims of the policy, the tools and the organizational capacity in turn will influence the outcomes of the mentoring relationship: increase beginning teacher knowledge, as measured by instructional practice, improved student achievement and beginning teacher retention. In

order to understand this framework, each component: policy aims, the instruments, the environment and the capacity will be examined individually. But none of these elements works independently of the other three; rather each influences or interacts with the others in going from policy to practice. However, before delving into the explanation of these items it is important to remember that there is always a tension between policy and practice (Cohen & Moffitt, 2009, p. 24). In other words, there is an "unavoidable" battle between what a policy means and how it is enacted. But it is not a linear operation since policy is interpreted in different ways by different players or policy actors. The above four elements play a crucial role in how this tension is eased or exacerbated (Cohen & Moffitt, 2009). Indeed, getting feedback from multiple participants will help in seeing how mentoring standards are interpreted in multiple ways.

Policy Aims

The policy aims are the goals of the policy or what Cohen and Moffitt call the "ideas" of policy (Cohen & Moffitt, 2009). The more ambitious a policy aim is (e.g., the further the distance between the policy aim and the current practice) the more resources will be needed to reach this goal and the more difficult it is for policymakers to create policy instruments which in turn make it difficult for the implementer to reach these ambitious aims (Cohen & Moffitt, 2009). Indeed, as Cohen and Spillane (1992) concur, teacher change as demanded by standards-based reform requires a "greater" structure for guidance. But there are non-organizational barriers to change such as teacher knowledge in which educators would need to not only learn more content but know how to use "constructivist" modes of knowing and learning. These tenets would need to be reflected

in teacher and student classrooms. Consequently, teachers, including experienced ones would need more opportunities to learn (Cohen & Spillane, 1992). But the central policy aim may be different from intermediate goals that might need to be reached before meeting the principal goal of reform. For instance, in their research on how elementary teaching reform goals in the mid -1990s in California changed classroom practice Cohen and Hill (2001) found that teachers needed to learn the new mathematics curriculum as both a learner and as a teacher. Moreover, the curriculum and the assessments designed to complement this mathematics reform were necessary to put the reform standards into real-life practice. These "instruments of practice" which "elaborated" upon the policy aim proved to be one of the essential elements to increasing student achievement on state mathematics assessment (Cohen & Hill, 2001).But teacher learning was not the reformers' main goal, (Cohen & Hill, 2001) even though this learning must occur before meeting this other objective. In other words, "policy should be distinguished from the instruments deployed in its support "(Cohen & Hill, 2001, p. 6). When analyzing mentoring practice, it follows then if one of the goals is to increase beginning teacher knowledge, increasing mentor knowledge may need to be the intermediating goal.

Unfortunately for policy implementers, policymakers prefer to keep these goals ambiguous, allowing the policy implementers to determine what is needed to reach their goals (Cohen & Moffitt, 2009). On the other hand, educational reformers want greater control of educational policy at the state and federal levels by "tightening" the ties between policy and local practice (Cohen & Spillane, 1992). Although there are typically three desired aims from mentoring program: Improved student achievement, improved

instructional practice and beginning teacher retention, only two will be examined: Beginning teacher retention and the enhancement of teacher quality.

Policy Instruments

Policy instruments as defined by Cohen and Moffitt (2009) are the "capability that policy brings to the relations with practice" (p. 25). These include money, mandates, incentives, and the "flexibility" to modify policy for the local context (Cohen & Moffitt, 2009). At the district level the most common policy instruments are curriculum materials and guides and professional development (Spillane, 2004). Under the categories of mandates and incentives standards are also belong on this list. However, standards are not just "designed" to aid in policy implementation but also to "satisfy" the interests of various groups (Cohen & Moffitt, 2009, p. 25). The standards-based reform was designed to create an "exoskeleton" of new standards, assessments and accountability to change learning and teaching practices (Cohen & Moffitt, 2009, p. 10). The exoskeleton was a guide for state and federal reformers that would not interfere with school governance and norms of autonomy and local control (Cohen & Moffitt, 2009).

Standards do not work alone. There are other policy instruments as well working alongside of standards to change instructional practice. But to work effectively, there must be "consistency" among the varying instruments (Cohen & Hill, 2001). For instance, in Cohen and Hill's (2001) study of instructional change as demanded by the new mathematics reformers the assessments, the curriculum, the curriculum materials, and the professional development were created to complement each other, thereby creating a consistent focus. California's mathematics framework or standards, was

utilized as a guide to create these instruments. Moreover, the coherency of the instruments at the "level of practice" is another goal for successful policy implementation. Teachers who learned from and through several different types of policy instruments that were "embedded in practice" had a "coherent guidance" from which to base their new practice. In other words, "standards, assessments, and accountability are more likely to succeed if they are accompanied by extended opportunities for professional learning grounded in practice" (Cohen & Hill, 2001, p. 10). But as noted by Cohen and Hill (2001) few policy instruments are made with the qualities of coherency and consistency in mind and few policy makers demand that these instruments have these characteristics.

Capacity and Capability

Capability is what the implementer brings to the policy such as knowledge, values, skills and dispositions (Cohen & Moffitt, 2009). According to Cohen and Moffitt (2009) capability and policy instruments are interwoven since "when policy instrument are effective, it is partly because they help to mobilize the capabilities that enable practitioners or organizations to improve services and solve problems" (p. 25). For advocates of systemic reform, the increase in capacity for teachers means changing how schools do business: schools would be not only where students learn but also where teachers learn as well (Cohen & Spillane, 1992). In addition, the differing capacities of beginning teachers and mentors may yield differing calls of specification. For the beginning teacher, she may want greater structure in terms of "what" and the "how" of teaching in exchange for less creativity. Curriculum frameworks which contain state

standards may need to be more specific; districts may need to be more specific in their curriculum as well. For purposes for this study, mentor and mentee capacity are the knowledge, skills, and dispositions that these individuals carry with them to the mentor relationship. According to Figure 1 mentor and mentee capability interact to create the desired outcomes (or policy aims)**.**

Environment

Using Yanow's book *How Does a Policy Mean?* Cohen and Moffitt (2009) explain that policy interpretation depends on the environment: the language, the location of policy enactment, the behaviors of others and other artifacts that may affect the implementation of policy. Each element takes on its own meaning, as assigned to by its implementers. Cohen and Moffitt (2009) see the environment including governance structures, political organizations, and socioeconomic context where the policy "emerge and subsist" as important elements to analyze. Thus, the elements within each middle school such as the principal and its mentors and the language that it is used to describe the mentoring program will be examined. This study through its analysis will give a comprehensive feel to what transpires within a mentoring relationship within a particular school in how one policy instrument, standards interacts with mentor policy aims, environment and capacity of the mentor to learn how to mentor and practice mentoring. In other, this study will explore whether mentoring standards matter.

CHAPTER 3: METHODOLOGY

This chapter provides an overview of the research design for this study. It gives a description of the sample, and states the procedures and instruments that were used for data collection as well as how data for this study was analyzed. In addition, a brief discussion of the focus of this study: mentoring standards and how it impacts a mentor's capability to mentor and the mentee's ability to teach is warranted. Indeed, mentoring standards appear to perform two simultaneous functions: as a policy instrument designed to reduce ambiguity for mentors and mentees and as a mechanism to increase the capabilities of both the mentors and mentees.

Standards as Policy Instruments

Standards whether they are designed for students or teachers were the central focus of the standards-based reform movement that began over two decades ago. However, the results of standards as a policy instruments to change instructional practice has been mixed. For standards to work, educators need to know them, and be able to apply them. In science and mathematics education there have been seismic changes in what teachers and students are to know and be able to do; these changes were evident in national standards of mathematics and science which got reflected in state content area standards. One question that has dogged researchers is how these content standards and reform-based teaching methods get filtered down into the mentoring relationship between an experienced science or mathematics teacher and a novice (Luft et al., 2003; Odell & Wang, 2002; Wang & Paine, 2001; Wang et al., 2008). Assumptions of the goals for existing induction and mentoring programs on the part of the mentor and mentee

appeared to influence whether standards-based teaching reached the beginning teacher's classroom. The purpose of this qualitative study (Bogdan & Biklen, 2007) is to examine how the mentoring standards shaped (or do not shape) the mentor- mentee relationship. In particular, this study looks at: How does the interpretation and implementation of mentoring standards influence the mentor-mentee relationship in high poverty middle schools?

Research Design

To get an in-depth perspective from those directly involved with mentoring on how mentoring standards affected (or did not) the mentor-mentee relationship, this study was qualitative. Qualitative studies allow the researcher to obtain rich and thick descriptions "of people, places and conversations" and to examine a topic's complexity in context (Bogdan & Biklen, 2007, p. 2). Context matters and plays a significant role in the interpretation of the data. For instance, actions of study participants need to be seen in their natural environment. Consequently, understanding the history of the setting and its influences on participant's actions and institution's reactions is an important component of qualitative studies (Bogdan & Biklen, 2007). In the naturalistic setting the researcher is the primary data collecting instrument (Bogdan & Biklen, 2007; Merriam, 2009) who seeks to describe the phenomenon through such activities as observing, interviewing and gathering and reviewing documents, yielding a comprehensive picture of what is being studied (Bogdan & Biklen, 2007). Moreover, one of the intents is to get as many perspectives on the investigated topic as possible (Corbin & Strauss, 2008).

Reliability and Validity Addressed

Finally, although reliability and validity are challenges for quantitative rather than for qualitative research studies, there are some concerns within the latter type of research that need to be discussed (Bogdan & Biklen, 2007; Creswell, 2003). First, reliability is not a concern of qualitative researchers since it is assumed that different researchers have different backgrounds and experiences; consequently, there is no expectation that two researchers will interpret research results in the same manner (Bogdan & Biklen, 2007; Merriam, 2009). A qualitative researcher's concern with reliability is the "fit" between what she gathers as data and what occurred in the naturalistic setting (Bogdan & Biklen, 2007).

Validity has more to do with the trustworthiness and credibility of the researcher (Creswell, 2003). To lend credibility to my research, I discussed my preliminary findings with two other qualitative researchers from the University who asked questions of my conclusions; I wanted to see if my findings "resonated" with them (Creswell, 2003). In addition, since I interviewed mentors, mentees and principals within seven schools and three collaborative settings, multiple perspectives were represented. Moreover, as I delved further into the research I discovered I needed to expand participant pool to include collaborative project directors, BTIM and/or an area Educational Service Center (ESC) official and Texas Regional Collaborative (TRC) officials to determine more about the (role) expectations for the mentor and mentee under the implementation of Texas' Beginning Teacher Induction and Mentoring program (BTIM). Finally, I presented

"discrepant" information that did not fit with the themes discovered within the data. These processes lent to the trustworthiness of the research and to the researcher.

Multiple Case Study

This study was a multiple descriptive embedded case study (Yin, 2009). According to Yin (2009) a case study is an "empirical inquiry that investigates a contemporary phenomenon in depth and within its real life context, especially when the boundaries between the phenomenon and context are not clearly evident" (p. 18). Multiple case studies permit the researcher to compare this phenomenon, based on a theoretical framework across contexts; this process allows for "theoretical replication", giving (or not) support to a group of propositions (Yin, 2009). In descriptive case studies the investigator supplies a descriptive framework at the onset on the study and uses it through-out the study; this all-encompassing framework states the research questions, identifies the units of analysis, supplies the conceptual framework with logical linking between the data and this framework and the criteria that will be used to interpret the results(Berg, 2009). "Embeddedness" refers to having more than one unit of analysis within a larger organization, encompassed within a study (Yin, 2009).

In this study the focus is not only on how mentoring standards affect the mentor-mentee relationship but to see if these effects look different in different collaborative and school contexts. Since TRC administers BTIM through its collaborative network it was found that other data points such as the types of mentor training, support mechanisms (e.g., professional development) played a role in how mentoring standards were defined and operationalized within each setting. This additional data added richness to the story

of mentoring standards Thus, due to the above attributes of this study a multiple case study was the most appropriate mechanism to help "tell" this story.

To guide the researcher in making sense of how different contexts react to the same policy instrument, used within the mentoring relationship a conceptual framework (or sometimes called a theoretical framework, Merriam, 2009). For this study I used Cohen and Moffitt's (2009) policy implementation framework. According to Maxwell (2005) a conceptual framework "is primarily a conception or model of what is out there that you plan to study, and of what is going on with these things and why—a tentative *theory* of the phenomena that you are investigating "(p. 33). In this study, the other concepts, as delineated by Cohen and Moffitt (2009) are the policy aims, policy instruments, and capacity and capability, and the environment. In addition, I am cognizant that the term "standards" carries multiple meanings; consequently, part of this sense making rested not how terms such as standards are conceptualized and operationalized but also how mentoring was conceptualized and operationalized within the different middle school settings, and different TRC collaboratives which administered the mentor training and support (See Spillane, 2004).

Researcher needs in multiple case study. To conduct "good" case studies, according to Yin (1998 as cited by Berg, 2009) the researcher needs: 1) An "inquiring mind", constantly asking questions before, during and after the gathering data stage and challenging oneself into the why a particular phenomenon is occurring or re-occurring; 2) an ability to listen, observe and take in information "without bias"; 3) to be flexible as she might need to change the types of data collecting techniques and use "alternative"

data sources if the situation merits; 4) the ability to understand and interpret the issues surrounding the phenomenon; and 5) to give an "unbiased" interpretation of the data, and being "open" to contradictory results. All of these research skills allow the researcher to achieve a holistic perspective on the studied phenomenon, without preconceived notions (Merriam, 2009; Yin, 2009). These researcher qualities give rigor to the study (Yin, 2009). For purposes of this study, after each observation and interview I described my thoughts, ideas and feelings within my field notes usually within a 24 hour window. I also recorded my thoughts into a digital recorder if I could not readily write my perceptions about the interviews and focus groups. This reflexive process was "an internal dialogue that repeatedly examines what the researcher knows and how the researcher came to know this" (Berg, 2009, p. 198).

Description of the Sample

Since this study looks at mentors and beginning mathematics and science teachers in high poverty middle schools, purposive sampling was used. The study encompassed three school districts: one urban and two major suburban in central Texas during the 2011-2012 academic year. Since BTIM is administered through Texas Regional Collaboratives' (TRC)[2] collaborative network, mathematics and/or science TRC project directors desiring to be part of the mentoring program applied for a BTIM grant; TRC officials would then decide which collaboratives would receive funding. All BTIM mentors or mentor trainers were to be initially trained either by TRC or through some

[2] TRC is a non-profit educational agency that supports and supplies professional development for P-12 science and mathematics teacher across Texas through its regional collaborative network

other "researched-based" mentoring program, as stipulated by Texas Education Code 21.458. Throughout the grant cycle, mentors were also to receive periodically professional development from their collaborative's project director(s) as specified in the grant application.

School Sites

Seven high poverty middle schools in three school districts in central Texas were purposively chosen. To choose these schools I examined the 2010-2011 academic reports generated from Academic Excellence Indicator System, accessed from Texas Education Association's (TEA) website to determine which middle schools were "high poverty". I defined "high poverty" as those schools where fifty percent or more of the study body had been classified as "economic disadvantaged" by TEA.[3]

Collaboratives

As mentioned above, TRC administers BTIM through its collaborative network. The project directors in the collaboratives essentially run BTIM by providing the initial and continual mentor support, and any other TRC grant requirements. The seven middle schools for this study belong to three school districts which in turn are housed in three separate TRC collaboratives. Although collaboratives are consortiums of school districts and another educational entity such as a local university, it is essentially the latter organization that implements BTIM. To get the names of the collaboratives participating in BTIM, I approached TRC official(s) who gave me a list of possible research sites.

[3] Economically disadvantaged students are those who are reported as eligible for free or reduced-price meals under the National School Lunch and Child Nutrition Program, or other public assistance

After receiving the approval from the collaboratives, I proceeded to garner the approval from three districts then to the seven middle schools and finally to the nine mentor-mentee pairs.

Participants

Nine mentor-mentee pairs (either in mathematics or science) within seven high poverty middle schools were purposively chosen. There were five mentors: three mathematics and two science). To aid in the identification of these mentor-mentee pairs, I first approached the school districts for permission to conduct research at their school sites. Then, I asked the principals at each site to identify possible pairings.

Mentors. Mentors were to have the following criteria: 1) Be trained in a "research-based" mentor training program, approved by TEA educational commissioner; and 2) have at least three years of teaching experience in mathematics or science. I had originally intended only to have practicing teachers within the same school in which the mentor and mentee were matched according to subject area and grade level. However, this proved not to be feasible since I would not have had an adequate number of mentor participants. Indeed, one mentor teacher dropped out mid-year since he left the teaching field. Moreover, as will be discussed in Chapter 4 many BTIM mentors either did not receive the initial research based mentor training and/or continual mentor support.

In the end, five mentors, two science and three mathematics, agreed to participate in my study. Three were practicing teachers (two mathematics and one science) within the same school (of which one was also science department chair) as their mentees; one who was the science/mathematics department chair and instructional coach in the same

school and one retired (middle) school teacher from the same district (as her mentees). There were three mismatches: One in regard to content (mathematics mentor teacher with two beginning science teachers) and one according to grade level (6^{th} grade mathematics mentor teacher with beginning 7^{th} grade teacher).

Mentees. Beginning teachers or mentees are educators who had three or few years of teaching in mathematics or science at the middle school level. These beginning teachers had a wide variety in teacher education preparation: five came through a more traditional university-based system and four came from alternative programs which appeared to vary significantly in terms of pedagogical requirements and supports that they received from their programs. Indeed, there was one beginning teacher who was trained as a physical education teacher through a traditional program and had taught one year in this subject, but he had passed the state's mathematics certification test and was teaching mathematics for his second year during the time of this study. In the end, there were five beginning science and four beginning mathematics teachers.

Most (five) of the mentor-mentee relationships were into their second year, but two were beginning their first. However, of those in their first year with their mentor two mentees had an established relationship with their mentor—either as teacher and department chair or colleagues teaching the same content area. In the later scenario, the mentee appeared to have been informally mentored the previous year by her then-current mentor. Moreover, each mentor and mentee (save for one mentee) also participated in separate focus groups of their mentoring peers (i.e., mentors in same collaborative; and mentees in the same collaborative).

Principals. Principals served as my primary conduit for mentor and mentee recruitment. All seven middle school principals agreed to be participants.

Collaborative project directors/BTIM and TRC officials. As I began this research I realized that I needed to expand the scope to include the project directors of each collaborative (save for one project director who did not consent to being interviewed) and/or BTIM officials who conducted or oversaw the initial and/or continual mentor training and support as well as an official in TRC. In the end three collaborative project directors: two from one collaborative (one mathematics and the other science) and one (science) from another collaborative agreed to be participants. Since the latter project director did not oversee the mentor training, I recruited the BTIM official who fulfilled this role within this collaborative. One TRC official also agreed to be part of this study; this individual gave me some of the history behind BTIM and its purpose. Although these individuals were not the focus of this study, they helped to fill in some of the gaps in how BTIM was implemented within TRC and within each collaborative.

Procedures and Instruments for Data Collection

For purposes of this study, I interviewed mentors, mentees, principals, collaborative project directors and/or BTIM/ ESC and TRC officials, and I conducted separate focus groups of mentors and mentors. In addition, I observed the mentor observing the mentees teach and subsequent post-conferences, followed by individual interviews of the mentor and mentee; this happened at least once during the school year. Finally, I gathered and did a content analysis of initial mentoring training materials and other BTIM and non-BTIM specific documents. This information gathered from these

procedures lent depth and richness to the study which in turn helped to reduce researcher bias and build research reliability and validity (Yin, 2009).

In the end, I conducted twenty-seven individual interviews with mentors and mentees (one at the beginning and another at the end of the school year); twenty-two individual post-conference interviews with mentors and mentees, derived from eleven observational cycles (observation and post-conference); thirteen individual interviews with the seven middle school principals; three interviews with project directors (from two of the collaboratives); one interview each of a BTIM official (from one of the collaboratives) and of a TRC official. I also conducted six separate focus groups: three for the mentees in each of the collaboratives, and three for the mentors for each of the collaboratives. I also conducted a content analysis of three texts: two from the initial mentor training manuals, derived from two "research-based" mentoring programs and the common mentor resource book.

Interviews

Interviews can be an effective way to gather information from a participant about a particular subject especially when the researcher is not able to observe behavior or wants to know how the participant feels or interprets the world around them (Merriam, 2009). For this study semi-structured interviews (Merriam, 2009) were conducted with mentors, principals, and mentees at the beginning and end of the year to gather information about mentors' experience and training and the criteria used to select a particular mentoring program (See Appendices A, B and C for the questions). In addition,

I interviewed once the collaborative project directors, BTIM and/or ESC official and TRC official (See Appendices F, G and H).

Semi-structured interviews were used since I needed to be flexible in my questioning (Merriam, 2009), allowing me to probe participant's answers (Berg, 2009) since I found great variability in experience level with teaching, mentoring and participating in specific formal induction and/or mentoring programs. The first round of interviews with the mentors, mentees and principals I tried to put the interviewees at ease and obtained information about their particular experiences within the mentoring relationship whereas the second round were based on the experiences the participants had during the school year with their mentor(s) or mentee(s). The interviews lasted about thirty to forty-five minutes and were conducted at a school site.

My semi-structured interviews with the collaborative project director, TRC official and/or BTIM official allowed me to get more information about the initial mentor training and support as well as to get their understanding of the mentor and mentee roles (and expectations) and how these role definitions were getting transmitted to the mentors and mentees. These interviews lasted about forty-five minutes and were conducted at an Educational Service Center, university or job-related site.

Focus Groups

Focus groups give insight into a wide range of topics, not usually obtained though one on one interviews (Berg, 2009). Interactions of the participants give a window into how these individuals interpret or socially construct and react to the studied phenomenon (Berg, 2009). For this study I conducted separate focus groups of the mentors and

mentees. These focus groups gave information about the mentoring relationships and training experiences, including any guides (such as mentoring standards) that they used to help them to mentor (See Appendices D and E for the questions). Focus groups lasted about forty-five to sixty minutes and were conducted at one of the school sites. One focus group of mentors was conducted in a local restaurant since the mentors from this collaborative did not meet formally.

Observations and Follow-up Interviews

In addition, I observed the mentor observing the mentee teach, followed by the subsequent post-conference at least once during the school year. After the observations of the post conference, I conducted brief individual interviews with the mentor and mentee; these interviews were unstructured and informal (Merriam, 2009), diving into what transpired during the lesson and post-conference. Moreover, I asked questions pertaining to some of the issues being raised by the mentor and/or mentee and the techniques and the tools that the mentor used during these mentoring activities. These post-conference interviews lasted about twenty to thirty minutes and were conducted at a school site.

During the observations of the mentor observing the mentee, I looked for any interactions (verbal or non-verbal) between the mentor and mentee, and observational tools used by the mentor. I also noted the roles that mentor took on (sometimes assigned by the mentee). These observations lasted between twenty-five to forty-five minutes, depending on how long the mentor spent in conducting this activity. In a similar vein, during the post conferences, I noted any tools used by the mentor and/or particular style

that he/she used with the mentee (e.g., asking how the mentee was doing; asking questions about student engagement).

Documents

Documents yield additional information to the study that might not be realized through observations and interviews (Berg, 2009; Merriam, 2009) and give insight into what is happening within an organization or group (Berg, 2009). There are several advantages to examining documents: 1) They can give a more unbiased look at the phenomenon since there is no researcher present that could affect or "alter the setting"; 2) they are usually easily accessible; and 3) unlike interviews and focus groups they are made without the research in mind (Merriam, 2009). Documents relating to initial mentor training including a common mentoring handbook was collected and analyzed.

Content analysis was used to examine the gathered mentoring documents. Content analysis is "a careful, detailed systematic examination and interpretation of a particular body of material in an effort to identify patterns, themes, biases, and meanings" (Berg, 2009, p. 338). Raw data garnered from these documents was coded and interpreted (Berg, 2009). Coding in this case involved a careful examination of the documents from which codes were "inductively" identified; these codes were "transformed" into labels or themes and the documents were categorized and sorted by these themes to "isolate meaningful patterns and processes". First, I examined these documents, looking for mentor and mentee role definitions and any tools used to perform these mentoring roles. Then I placed these elements within Cohen and Moffitt's policy implementation framework (i.e., policy aim, policy instrument, capability and/or environment). Finally, I

looked for emerging themes from these role definitions e.g., building the mentor-mentee relationship). Document analysis in this study was performed to see if mentoring standards, in terms of role definitions were mentioned and if so in what manner.

In the end, I analyzed the common mentoring book, Paul Rutherford's (2005) *Mentoring in the 21st Century: Creating a Culture of Learning* as well as the two "research-based" mentor training material binders from two of the collaboratives. (As will be noted in Chapter 4, the project director in the third collaborative did not supply initial and continual mentor support for her mentors). One of the "research-based" mentoring training materials was Mentoring Texas (MT) which was used by one of the collaboratives. It was based on "train the trainer" model so materials were designed for the trainer to use in the training of the mentors. The other collaborative used Texas Beginning Educator Support System (TXBESS); these materials I received from the regional ESC official who had trained the mentors in this district several years prior to the implementation of BTIM.

Procedures

The first step to the data collection process was to obtain IRB approval and any site approvals as needed (Berg, 2009). Interview protocols as mentioned above guided the interviews and focus groups. The interviews lasted about thirty minutes whereas the focus groups lasted about forty-five minutes to an hour. Before interviewing and conducting the focus groups I piloted the questions by having other educational researchers and practitioners to examine these questions for meaning. I used these comments to make the interview process clearer for the participants. Initial mentor

training materials and the common mentoring resource book were gathered from the mentors, BTIM official or ESC official who trained the BTIM mentors. I was obtained the mentor responsibility or commitment contracts from the mentors or the collaborative's project director.

Data Analysis

To analyze the data from the interviews and focus groups open coding was used. Open coding is a process in which data is taken apart and categorized into concepts (Corbin & Strauss, 2008). This procedure allows the researcher to see properties and dimensions of these concepts within the data, lending itself to making comparisons between other interviewees or participants and aiding in describing the studied phenomena and weaving them into a "coherent explanatory story" (Corbin & Strauss, 2008, p. 197). In this study, interviews with mentors, mentees, principals, project directors, BTIM officials and TRC official along with the focus groups were open coded such that I looked for common emerging concepts within the data and across participants. In particular, since Cohen and Moffitt's (2009) framework on policy implementation was utilized, I found emerging categories, discovered within the data which I proceeded to fit into the four categories: policy aims, environment, capability and capacity and instruments. Then, I looked for themes that described that particular policy element. This process helped me to tell the story about how the interpretation and implementation of mentoring standards shaped the mentor-mentee relationship. Although there is some debate about the use of theoretical or conceptual frameworks in qualitative

research, these structures are useful in giving a "guided approach to research" (Corbin & Strauss, 2008, p. 42).

All interviews and focus groups were transcribed by an outside professional and then, checked by me for accuracy. Then the data was analyzed through open coding with which I was looking for categories and emerging themes. To help in the coding and telling of the story the computer software ATLAS.ti was used. Since I was new to this coding software, I took an on-line course offered by the software company to familiarize myself with the technical aspects of this software.

Limitations of Qualitative Study

Despite the richness of the data, there are some limitations to the use of qualitative research. Since this type of research is concerned with situated or contextual understanding of what is being studied, generalizations cannot be made, divorced from context (Bogdan & Biklen, 2007; Merriam, 2009; Willis, 2007). Moreover, some argue that objectivity is lost since the role of the researcher and participant become blurred (Willis, 2007). Indeed, as Bogdan and Biklen (2007) acknowledge a qualitative researcher can never view her research from a completely unbiased standpoint; her life experiences, no matter how hard she tries will be reflected in the interpretation of the data (p. 38). To reduce the potential of this bias I described my thoughts and feelings a within my field notes (See Creswell, 2003; Willis, 2007).

Researcher's Role and Biases

The researcher is the primary instrument of data collection (Berg, 2009; Merriam, 2009) and interpreter of the research as such she needs to acknowledge her potential

biases (Merriam, 2009). As a former secondary teacher and student teacher facilitator at a state research university, I have my own views on what makes a quality teacher and mentor. Like Corbin and Strauss (2008), acknowledging these biases made me aware that my thoughts and experiences influenced the research process; therefore, I needed to be self-reflective of these influences. Therefore, through the gathering of multiple perspectives through interviews, focus groups, and observations, and the content analysis of gathered materials as well as the maintenance of field notes aided in the trustworthiness of this research.

This chapter described the research design of this study, including a description of the sample and the procedures and instruments used for data collection and discussion on how the data was analyzed. This process lent itself to a rich and thick description of how the interpretation and implementation of mentoring standards impact the mentor-mentee relationship in middle schools.

CHAPTER 4: FINDINGS

Induction programs are often portrayed as a commonsense solution to improving the beginning teacher retention rate and increasing the novice's pedagogical knowledge. Although both goals are laudable, much of the research on the induction of beginning teachers tends to focus on the former as its key outcome without critically looking at the components of a "successful" induction program. Mentoring is usually the primary element of such programs but there appears to be much uncertainty about what undergirds a "successful" mentor-mentee relationship. Mentoring standards--what the mentor and mentee need to know and be able to do within this relationship are sometimes accepted as a *sine qua non* quality indicators without a strong evidentiary base to support their use. Consequently, they have not been scrutinized to determine how they are impacting the mentor-mentee relationship.

The purpose of this study is to bridge this gap by examining the possible influence that mentoring standards, under a state mentoring program have had on the mentor-mentee relationship of beginning middle school mathematics and science teachers. Namely, this study looked at: How does the interpretation and implementation of mentoring standards influence the mentor-mentee relationship? To do this, I first identified the mentoring standards in various mentoring documents including the state's educational code. Second, I examined how these mentoring standards were or were not implemented under the auspices of the Texas Regional Collaborative (TRC), a state non-profit educational entity that supports K-12 mathematics and science teachers through its collaborative-based network. Specifically, I looked at how the mentors and mentees

interpreted and enacted their roles within Texas' Beginning Teacher Induction and Mentoring program (BTIM). Before delving into the findings of this study, I will give a brief description of the five mentors and nine mentees housed within the three TRC collaboratives which directed the implementation of this mentoring policy, followed by a "snapshot" of BTIM.

Description of Collaboratives: Mentors and Mentees

This study involved nine mentor-mentee pairs in seven middle schools in three school districts in central and south Texas. Although the mentor-mentee pair was the unit of analysis, it was the project directors and/or the BTIM officials who oversaw the training and the support of the mentors as they mentored the four beginning mathematics teachers and the five beginning science teachers. I will briefly describe each collaborative, the district and school in which these mentoring pairs operated. However, this is not a comprehensive description of the collaborative since the five mentors and nine mentees did not comprise the entire cadre of BTIM participants. What follows is a description of the nine mentor-mentee pairs within seven middle schools in three school districts in central Texas, housed within three TRC collaboratives.

Appleton collaborative. The Appleton collaborative-BTIM was a consortium of several area school districts and a regional private university in an urban area in south Texas; it was administered by a mathematics TRC project director who also worked at the university. Appleton Collaborative-mathematics was comprised of ten independent school districts and two charter schools. For this study, the three middle schools were housed within the Watertown School District which according to the Texas'

accountability system was the largest recognized school district in the state. The district is located in an urban area of central Texas and it serves approximately 90,000 K-12 students. The three middle schools, Ascot, Abilene and Alvira in which the mentor-mentee pairs work according to the state's accountability system were all academically acceptable, save Ascot which was recognized during the 2010-2011 school year. All three schools were designated high poverty schools. The mentor, Angelica was a retired veteran with over thirty years of experience from Abilene Middle School in the Watertown school district. At the time of the study she was into her second year as BTIM participant in which she mentored all the beginning mathematics and science middle school teachers in Watertown district; this list included those veteran middle school teachers who were new to teaching either mathematics or science. Angelica has had a wealth of experience mentoring beginning teachers including being a participant in the Watertown's SchoolHouse mentoring program in which she received formal mentor training. She also was the only mentor in this study who participated in TRC's professional development concerning Texas Mentoring program.[4]

Two of the mentees were into their second year of mentorship with Angelica: one of the mentees, Julie was a sixth grade mathematics teacher who was beginning her second year teaching at Ascot Middle School; the other was a seventh grade science teacher teaching at a different school from the previous year. Robert had been a seventh grade mathematics teacher at Ascot middle school before being let go and rehired for the

[4] Although this training was usually reserved for mentor trainers, according to TRC official some mentors also received Mentoring Texas training directly as a function of TRC.

science position in Abilene; he was beginning his second year of teaching but had worked in another profession before becoming a teacher. Both had gone through traditional certification programs at state universities: Julie in Texas and Robert in Illinois.

Joe was being mentored for the first time by Angelica. Like Robert, he was in a new position; he went from being a seventh grade physical education/coach to a seventh grade mathematics teacher at the same school, Alvira Middle School. Wanting to stay at the same middle school, Joe passed the mathematics Texas professional teaching assessment but had had neither pedagogical training nor experience in teaching middle school mathematics. This was Joe's second year teaching but first year teaching mathematics and participating in BTIM.

Big Bear collaborative. Big Bear Collaborative-BTIM is a consortium of a state public university and four area school districts and three charter schools in central Texas. Although there was a science project director from the university who was the BTIM administrator, it was a former principal and assistant superintendent from an area school district who was actually responsible for the training and support of the mentors. Watertown School District was an academically acceptable school district which served approximately 15,000 K-12 students in central Texas. The two middle schools for this study, Beaver and Bison were designated high poverty and under Texas' accountability system were both, as well as its district academically acceptable. Bison Middle however, was a relatively new school that serves high needs students.

From the Valley School district there were two mentors: Mike, a second year BTIM mentor and ten year–plus veteran eighth grade mathematics teacher at Bison

Middle School and Susan, a first year BTIM mentor who was also the mathematics-science academic coach and department chair at Beaver Middle School. Although this is Susan's first year in a formal mentoring program, Mike has had extensive mentor training under the Milken Foundation's Teacher Advancement Program (TAP) that his school had participated in for three years about three years before this study. However, the school no longer participates in this program. He has also received some training on using the PDAS, the statewide teacher assessment while studying to become a school administrator.

Mike had been paired up with two second year beginning science teachers; Helen in the eighth grade and Daryl in the seventh. Helen had completed an alternative training program through a regional Education Service Center whereas Daryl had completed a more traditional teacher certification program at a state university. Although both were in their second year teaching, they had been long-term substitutes in other area school districts before accepting their positions at Beaver Middle School

Susan worked with Justin, a second year eighth grade science teacher who had completed a teacher education program in New York where teachers are required to have a master's degree in the content area. Although Justin had participated in BTIM the previous year, this was his first experience being mentored by Susan. Indeed, this was Susan's first year in the school district although she had taught and had some administrative experience in an area school district before accepting her position at Bison Middle School.

Clementine collaborative. Clementine Collaborative-BTIM is comprised of a regional educational service center and two major suburban school districts in south Texas. The BTIM grant although under the responsibility of the mathematics TRC project director, is also facilitated by the TRC science project director in meeting the needs of the grant (e.g., setting up professional development for the mentors). Xerxes School District served approximately 15,000 K-12 students. For this study there were two mentors: Joan, a twenty-year plus veteran mathematics teacher and Margarita, a thirty year veteran science teacher and department chair.

Joan had been teaching sixth grade mathematics for several years at her school where she had previously been department chair. She had also extensive experience as a mentor; for two years, she had been a mathematics mentor through an urban initiative in which she offered professional development, and observed beginning teachers. Joan mentored three mathematics teachers at her school, Clover Middle School. Only two were part of this study, Sally and Rosario; both were into their third year of teaching mathematics: Sally in seventh grade and Rosario in the sixth. They had also gone through alternative programs to get their teaching licensure, although both acknowledged that in college they had wanted to become teachers.

Margarita served as science chair and was also a practicing sixth grade science teacher. She and her mentee, Pedro, a third year middle school science teacher taught at Cherrywood Middle School. Margarita, however became a mentor late in the school year (February) after Juan, an earlier assigned science mentor for Pedro had left the school in December. This mentor, hence at the time of this study had not received or participated in

any BTIM mentor training although she had experience mentoring beginning teachers in other formal mentor programs such as the district's mentoring program.

Xerxes School District is a high poverty district in which approximately 89% of its student body is economically disadvantaged. This suburban district served approximately 15,000 students; under Texas' accountability system, this district was academically acceptable during 2010-2011. The two schools in this study, Cherrywood and Clover, are also high poverty, academically acceptable schools during the same period.

All seven middle schools were characterized by TEA as high poverty schools. Moreover, these schools' student demographics were very similar in which the majority of the students were Hispanic, followed by White and African American (See Table 1).

BTIM in a Snap-shot

Although BTIM had been in existence for several years, Texas Regional Collaboratives (TRC) did not take over the administration of this mentoring program for beginning mathematics and science teachers until August 2009. But it did not have its first cohort or cycle of mentors and mentees until the following spring. The exchange of the responsibility for this mentoring policy from the Texas Education Agency to TRC was due to the fact that few districts applied for the BTIM grant due to the time and energy needed to devote to such an undertaking in some cases for only a small cadre of beginning teachers. TRC officials felt they could fill this void and get more districts involved through their network of mathematics and science regional collaboratives.

TRC oversees BTIM through its web of 26 statewide mathematics and science collaboratives.[5] Mathematics and/ or science project directors would apply for the BTIM grant and TRC officials make the determination about the collaboratives' acceptance into the mentoring program. In regard to accountability for BTIM, project directors were required to submit an end-of-the-year report, and mentors were to turn in their mentor logs, which documented when the mentor-mentee met and the topic of conversation; these logs needed to be initialed by the mentee. Although there were some different requirements for the mentors, especially as regards to the requirements of observations, the mentors in all the collaboratives were required to meet face to face with their mentees on a weekly basis. However, there were no TRC requirements for the observations of mentees. If observations were a grant requirement, they were a requirement of the collaborative's project director, not TRC. As such mentors were paid regardless if they observed their mentees. Consequently, the occurrence of observations were in reality not a mentor duty or responsibility, rather a recommended (although it is not stated as such) activity.

All three collaboratives were into their second year of BTIM implementation. In most cases, the mentor-mentee relationships were well-established either through BTIM or through more conventional relationships such as department chair to teacher or teacher to teacher. In addition, most of the beginning teachers were into their second or third year of teaching at the same school. Three of the mentors (Joan, Mike and Angelica) were into

[5] It should be noted that there are other entities that administer BTIM for the other content areas.

their second year as BTIM mentors; only Julie was a beginning BTIM mentor and although Margarita came late into BTIM, she had participated in several other formal mentor trainings. However, as of late last year, she had not attended any of the BTIM mentor sessions.

Part of the story of understanding mentoring standards is knowing their location, their function(s), and their format. For the latter component, I looked at the formality as well as the specificity of these standards within BTIM mentoring documents. I looked at Texas Education Code, the mentoring training materials under two "research-based" mentoring programs, the common (collaborative) mentor guide book and each collaborative's responsibility mentor contract. In this content analysis, I identified the mentoring roles and tools for both the mentor and mentee, specified within these texts as well as any emerging themes. Moreover, for each of these "standards" or "guidelines" I also categorized them according to Cohen and Moffitt's framework which looked at policy implementation through four elements: Policy aims, policy instruments, capability and capacity, and environment.

I will begin the content analysis with the BTIM-specific texts: The Texas Education Code and the mentor responsibility contracts. Then I will discuss the standards within the common mentoring book, followed by the two research-based mentoring program training guidebooks. To help frame this discussion, I will start with a brief discussion of how mentoring standards fit within the big picture of induction standards.

Findings

In this section, I discuss the findings from my document analysis of BTIM-specific and non-specific BTIM texts, the interviews and focus groups of mentors and mentees and my observations of the mentor conducting observations of the mentee teaching and subsequent post-conferences. Namely, I found that there were varying levels of specificity and formalness within BTIM texts. Consequently, mentors and mentees needed to compensate for the lack of mentoring standards-in-practice.

The Mentoring Standards Onion: BTIM-specific and Non-specific Texts

In this study I examined mentoring standards contained within Texas' Beginning Teacher Induction and Mentoring program (BTIM). However, mentoring standards usually are not separate from induction program standards since mentoring is often the principal activity of induction programs. Consequently, one cannot discuss one without discussing the other. Induction program standards can take many forms. The New Teacher Center (NTC) has identified three types: Foundational, instructional and structural (NTC, 2011). Mentoring standards could be categorized as one component of structural standards of formal induction programs since they include the mentor role and responsibilities, and mentor professional training as well as "… a collaborative system of formative assessment for beginning teachers and targeted, differentiated professional learning opportunities for beginning teachers" (NTC, 2011, p. 4). But since I was focusing on the effect that mentoring standards might be having on the mentor-mentee relationship, I did not look at other elements of structural standards such as mentor selection and assessment.

I found mentoring standards in four places: State legislative code, mentor training materials, the common mentor resource book and mentor responsibility contract which mentors needed to sign in order to participate in the mentoring program. The mentor commitment contract along with the mentoring log was given to all mentors as part of their participation in BTIM. These documents were of two general types: BTIM-specific—those texts that pertained to the implementation of this mentoring program and BTIM-non-specific texts those documents that though used in the implementation of BTIM could have been used with other mentoring and/or programs. In the former category, these texts included the state legislative code and the mentor responsibility contract; the latter category, the BTIM non-specific documents included the mentor training texts and the common mentor resource book. From the content analysis four themes emerged: (1) a lack of specificity in regard to the mentor's roles within t BTIM-specific documents; (2) a lack of formalness for the mentor and mentee role(s) within BTIM non-specific documents; (3) a strong emphasis on the supportive role of the mentor; and (4) an almost non-existent role for the mentee, across all mentoring documents.

BTIM-specific documents: Lack of role specificity. Both of the BTIM specific documents—the mentor commitment contract and educational code listed the roles of the mentor but they gave few specifics on how the mentor was to perform her duties within the mentoring program. For instance, the mentor was to conduct observations and "assessments' of the mentee; however, no observational tool, tied to any professional teaching standards which were linked to performance standards was listed; these

documents, in essence were just lists of duties for the mentor. More importantly perhaps is that the BTIM-specific texts appeared to be almost entirely focused on the mentor with little or no delineation of the mentee roles. The educational code, for instance discussed the types of professional development for the mentee, but not what the mentee was to do within the mentor-mentee relationship.

BTIM non-specific documents. The BTIM non-specific texts included Paula Rutherford's (2005) *Mentoring in the 21st Century: Creating a Culture of Learning* and the two "research-based"[6] mentor training texts: Texas Beginning Educator Support System (TxBESS) and Mentoring Texas (MT). Two of the collaboratives followed Mentoring Texas (MT), an apparent and acknowledged spin-off of the University of California-Santa Cruz's New Teacher Center mentor training (NTC) and the other collaborative used TxBESS. Although all three of these texts appeared to offer more specificity in regard to mentoring standards and supplying some mentor and mentee tools than the BTIM-specific documents, each lacked the formalness of being called "standards".

More role specificity but lack of formalness. Within the BTIM non-specific texts—the research-based mentor training materials and the common mentoring book, there appeared to be more specificity on how the mentor and mentee were to enact their roles, including possible mentoring instruments. For instance, the mentoring book Paula Rutherford's (2005) *Mentoring in the 21st Century: Creating a Culture of Learning*

[6] According to Texas educational code the "research-based" mentor training programs need to be approved by Texas' educational commissioner

focused on particular themes such as "data driven discussions" and "mentor-mentee interactions". It also included some mentor and mentee tools such a professional growth plan and observational protocols. The mentoring process was divided into stages so that the mentor could determine what area he or she was working on with the mentee. However, this resource book was just that a resource book so it did not appear to be organized in a way that would allow the mentor to access readily what "standard" or mentor or mentee role it was addressing, coupled with the tasks and mentoring tools.

Mentoring Texas (MT). TxBESS and MT also fleshed out the mentor roles with varying degrees of specificity in regard to mentee role definition. But MT was a resource to be used by the mentor trainer (e.g., the collaborative's project director). Consequently, MT mentor training book had the look and feel of a curriculum guide in which activities could be performed to teach mentors their duties and responsibilities during the mentor trainer training. This mentor training binder contained four "training outcomes" that described what the mentor was to do within the mentoring program. For example, the mentor was to "… create professional growth environments for new teachers grounded in norms of continuous inquiry, ongoing assessment and problem solving" (MT training binder, Day Two, under OH, pp. 15, 17). However, like the BTIM-specific documents this text did not give any specific role for the mentee. In addition, similar to the mentor resource book, this trainer handbook seemed to have lacked formalness; it did not match, for instance, the training outcomes to any of the activities or mentor resources. Moreover, the mentor tools did not seem to be tied to any specific professional teaching standards.

Texas Beginning Educator Support System.[7] On the other hand, the ESC-adapted TxBESS handbook appeared to have been designed for mentor and mentee use. For example, it had tabs for "mentor", "professional development" and "resources". Although it contained some tools directed towards the mentees, instruments such as "establishing routines" (MT 17) they appeared to have been designed for the mentor to work with the mentee. That being said, the mentee could find elements (e.g., "questions to ask the mentor", BT5) which pertained to the mentor-mentee relationship but most of the text appeared to be directed towards the business of being a teacher, not towards their role within the mentoring relationship. But this mentor and mentee guidebook did give "mentor's categories of support checklist" which classified mentor's duties into elements such as "instructional", "system", and "emotional". Each of these areas was further divided into specific actions such as "talk about curriculum guides, Texas Essential Knowledge and Skills (TEKS) and teachers' manuals", and "share expertise on planning". But similar to MT, there did not appear to be any formality to these roles—some overarching "standard" connected to specific mentoring tools. Indeed, it did not contain any observational protocol, aligned to any professional teaching standards nor to any performance standards that ranked the mentee's level of competence in particular instructional areas

[7] The TxBESS text had been adapted by the collaborative's Educational Service Center so it was not a comprehensive resource, delineating all of the original TxBESS program standards. For example, it did not contain an observational protocol, aligned to any professional teaching standards nor any performance standards that ranked the mentee's level of competence in particular instructional areas which the original TxBESS materials contained

Mentor role emphasis: Build the mentor-mentee relationship. Concerning the roles for the mentor, the mentor resource book and the two "research-based" mentor training texts appeared to have put a heavy emphasis on the mentor as an advocate, resource and emotional supporter. For example, the mentor was not to be put into any evaluative role with the mentee; according to the mentoring book, the mentor could perform "mock" formal (district) observations, followed by "data-driven discussions"; under ESC-adapted TxBESS guide, the mentor would "encourage implementation of effective teaching strategies"; and under MT, the mentor would use "formative" assessments. During post-conference and conversations with the mentee, the mentor was to suggest not dictate ways to improve instruction and classroom management. More importantly, across these texts there appeared to be an assumption that the mentor could conduct these types of observations and conversations without additional training. In other words, there seemed to be an assumption that the mentor would already have these capabilities. Finally, there did not seem to be explicit instructions on how the mentor was to balance this role of helper and assessor (e.g., observing with the use of data) within any of the mentor training texts.

No real mentee role definition. Finally, within all the texts there was not a strong definitive role for the mentee; mentees appeared to be at the recipient end of the relationship. Indeed, although ESC-adapted TxBESS materials supply some mentee tools such as needs-assessment for the beginning teacher or state that the mentor needs to help the mentee to develop her reflective skills and Rutherford mentoring book gives some tools for the beginning teacher (e.g. reflection over the induction/mentoring program)

there was not a concentrated look from the mentee's side—what she needs to bring to the mentor-mentee relationship.

Although from the document analysis there appeared to be mentoring standards at various levels of specificity within the BTIM-specific and non-specific documents mentors and mentees perceived that formal mentor definitions did not exist since there was no "list" which they used to guide their practice. I called this "lack of mentoring-standards-in-practice" even though in actual practice there were several themes that emerged. In particular, the mentors seemed to feel that their primary role was to build the mentor-mentee relationship, which in turned shaped how they mentored.

Lack of Mentoring Standards-in-Practice

Before I began this dissertation study, I was given the impression that there were specific formal mentoring standards in at least one of the collaboratives.[8] However, once I started to interview mentors and mentees I soon learned in the eyes of the mentors and mentees that there were no formal mentoring "standards" to guide them. Even the TRC official informed me that there were no "standards", although she did acknowledge that the mentor roles were defined in at least one of the research-based mentor trainings.[9] Consequently, it appeared that the mentor's knowledge of her role needed to be derived from the research-based mentor training, offered by her collaborative. However, due to

[8] From the Clementine Collaborative I was informed from the lead mentor trainer that the ESC uses TxBESS, a comprehensive induction and mentoring program which has formal program standards

[9] TRC offered Mentoring Texas for BTIM project directors who did not have access to other formal "research-based" mentor training.

the inconsistency in initial and continual mentor training, many mentors and mentees appeared to be on their own to make sense of the mentoring process. Those without initial and/or consistent and targeted mentor training seemed to know their mentoring duties: Have face-to-face weekly meetings with their mentees and if mandated by their collaboratives, observe their mentees teach. Those with the targeted monthly mentor training appeared to flesh out their roles from interaction with other mentors and the BTIM official, a former area school administrator who ran the mentor trainings.

Ironically, the one central theme from the research-based mentor training appeared to parallel what I saw in practice despite the differences in mentor training: Build the mentor-mentee relationship. From my interviews with mentors, it seemed that they focused most of their efforts on building and maintaining their relationships with their mentees. Consequently, from my observations they seemed to downplay their roles as observers: Few tools if any physical observational instruments were utilized with their mentees, none of which appeared to have been tied to any professional teaching or performance standards. Indeed, they did not want to be viewed an evaluators. Observations in some cases appeared to be acts of compliance or events in which the mentor acted as administrator in absentia, giving mentee feedback on material items such as the presence of content objectives on the board. Mentors tended to keep their comments positive and only made suggestions to the mentee.

More importantly perhaps is that the mentee's role was not well-defined, if at all in any of BTIM-specific texts. Mentees did not have any formal avenue such as an orientation to learn their roles. Consequently, mentees seemed to have to rely on their

own perceptions of what a mentoring program should be, and their roles in it to help guide them. Interestingly enough, the lack of formal guidance in these roles did not seem to have impacted the mentor-mentee relationship in regard to how the mentees and/or mentees felt about each other personally or in their official professional roles. But it did appear to affect the manner in which observations and dialogues between the mentor and mentee were carried out. For example, the observations seemed to be informal events. In some cases, the mentees perceived their mentors as a "mom" or "uncle".

Mentor's role: Not fully defined, not enacted. A central function of mentoring standards is to define the roles for the mentor and the mentee as well as to identify the tools to be used in carrying out these mentoring functions. Within the implementation of BTIM the mentor's roles and duties appeared in four arenas: Texas' BTIM educational statute, mentor commitment contract, and the mentor training and accompanying materials. But the mentoring standards, what the mentor and mentee are to know and do within the mentor-mentee relationship appeared to be only specified with any detail in the mentor training materials. Consequently, the mentors and mentees knowledge of their roles within the mentor-mentee relationship seemed to hinge on receiving the mentoring standards contained in the mentor training manual and mentor materials and/or reading and utilizing the common mentoring book.

Under TRC's administration of BTIM the professional development and support mechanisms were the responsibility of each collaborative's project director(s) or BTIM official. In practice, however, some of the mentors did not receive any type of initial mentor training and/ or any continual mentor support, targeting mentor development.

Only one collaborative, Big Bear seemed to offer consistent mentor learning through its monthly mentor meetings. The spotty mentor training appeared to mean in the eyes of the mentor a reliance on BTIM specific documents or their own learning to define their mentoring role(s).

Spotty formal mentor trainings. The mentors from two of the collaboratives seemed to have received spotty mentor training: One received no initial and continual mentor training and another received TxBESS mentor training many years ago—before the implementation of BTIM; however, according to one of the mentors this training did not leave a lasting impression on her. Other mentors from the collaborative who were first year mentors never received any formal training or received some training on what an effective mentor does. Due to this uneven training, it seemed that the mentors needed to rely on BTIM-specific documents or on their own self-training to learn about these roles.

In the Appleton Collaborative, the mentors (all retired teachers) had received no mentor training from their BTIM project director so they needed to depend on the BTIM-specific documents and/or experience to understand their role. Consequently, when I asked about the mentoring standards or guidelines, Angelica replied:

> There's really no guidelines. We were told when the director approached me from [area university] they said, these are just some of the requirements. All we do is keep a log of when we meet, what are some of the dates that we discuss together, that's one of the requirements. Of course, we observe them twice per semester, try to give them feedback with some of the things we feel they're doing right or need to do or whatever. But really, there are no particular guidelines as to what am I looking for other than bringing my experience to the classroom or to my mentee. (Angelica, mathematics mentor, Appleton Collaborative)

The mentors in the other two collaboratives did receive initial mentor training. In the Clementine Collaborative, one of the mentors acknowledged that her TxBESS mentor training was so long ago that she did not remember what material they covered. In this collaborative initial and continual mentor training appeared to be spotty as evidenced by the following conversation from the mentor focus group after one of these mentor training sessions.

> *Joan:* …And then, I don't know, it's been probably three or four years ago that I did the TxBESS at [Area City College]. Then last year they did give us books on mentoring but it was up to the mentor to read the books and you know I'm sure that a lot of mentors probably didn't read the books, I have read them. But it gave a lot of guidelines to discuss with the mentees.
>
> *Laurel:* So, are a lot of you getting books and things or that sort, kind of resources and things or does anyone want to comment on that? I know you've been getting lots of…it seems like it, I don't know.
>
> *Kim:* My name is [Kim] and this is the first year that I've done the mentoring program. And so far really, they've given us opportunities and made us aware of trainings and told us if we wanted to go to a specific training that they would provide the means for that. But really, all I've done as a mentor as far as training goes is attended that one training in September and our training today. And that's really the only mentor training that I've had and this is my first year participating.
>
> *Laurel:* So, what did that mentor training look like? Did they talk to you about some of the things you had to be able to do to be a mentor? What kinds of things were they covering within that context?
>
> *Mentor6:* They definitely talked to us about the types of support we would be providing the mentors and making sure that we were reaching out to them and not just waiting for them to come to us. That we were having our face-to-face meetings with them weekly and observing them and being able to give them feedback in an appropriate way.
>
> *Laurel:* Did anybody else have some other either training or professional development or something that they had? It could be mentoring in general; it doesn't necessarily have to be part of the BTIM though I know this is like the second iteration of it.

> *Mentor8:* Last year, here at [Region H], [Brian Stevens] did a lot of trainings with us that went over what a mentor does and what we look for and what kind of support, the same thing that she was saying.
>
> *Laurel:* Did they ever take you through anything else like what specifically you're supposed to be looking for when you're actually going out there and being a mentor?
>
> *Mentor8:* I think they gave us some guidelines. More like how to give the information where they need corrections and how to write up the forms. That all included what we were looking for and what kind of skills set were we looking for from those teachers.
>
> *Laurel:* Anybody else want to add?
>
> *Mentor9:* That kind of jogged my memory. I know they gave us good criteria of what a good mentor is versus a non-effective mentor. I remember that being very useful. They kind of give you a whole broad picture of what kinds of things, what kind of needs the mentee may need and how you're going to have meet those needs on a daily basis from academic, curriculum, emotional, psychological. It was a really well done, I think, workshop. It showed you everything, how to meet the needs of the mentee. So, that was last year under Mr. Jenkins. (Mentee focus group, Clementine Collaborative)

Consequently, many mentors felt as though they needed to depend on their prior teaching, formal mentor experiences and/ or on specific BTIM documents since the initial and continuous mentor training was spotty or even non-existent.

Lack of formal standards and specificity. According to mentor interviews there was no official "list" or formal role definitions with which they could rely on. Similar to Angelica in Appleton Collaborative, Joan felt as though there was not one thing guiding her. Consequently, when I asked Joan from Clementine Collaborative about mentoring standards, she looked at me with puzzlement and commented:

> I cannot think of anything to tell you. Now, I have read books on mentoring and sometimes I'll even flip through something and they'll say, oh, encourage them to relax now because it's been such a long haul. But as far as having a list, I don't. I mean, like I said, I've got books that I can go back and refer to but having

> memorized this or anything like that, no. (Joan, mathematics mentor, Clementine Collaborative)

Even if the mentor received initial and on-going mentor training, there appeared to be a lack of specificity, in the minds of the mentors regarding the mentor's role. Susan, a first year BTIM mentor in Big Bear Collaborative used her own experience as a guide as well as some of the continual mentor training but there did not seem to be anything "specific" that she referred to guide her as she mentored. When asked about what was guiding her as she mentored, she replied:

> Just the things that were in math science, we're really looking for retention and then I just apply that personally. All right, what retains me in a field and then professionally? So, I've tried to focus on professional satisfaction and to make sure, again, that the teacher's feeling supported. So, that and also the information I gather from my BTIM meetings, and from continuous communication with the mentor, those are really my guiding elements. I wouldn't say there's anything specific, necessarily. (Susan, science mentor, Big Bear Collaborative)

Consequently, it appeared that most of the mentors did not depend on any formal mentor standards; instead they relied on their own understanding of what the mentees needed to compensate for the lack of formal mentoring standards

Lack of common observational mentoring tools. Standards often need tools to accompany them to ensure accountability for the actions stipulated under them and give a benchmark to the participants for their performance of these actions. Under TRC's administration of BTIM, there was only one common mentoring tool: The mentoring log. This text was a means in which the mentor would document the topics and the dates for the weekly face-to-face mentor-mentee meetings; mentees were required to initial them. However, based on my observations of the mentor conducting observations of the mentee

teaching, there was no common observational tool used across the collaboratives. Indeed, the observational tool appeared to be at the discretion of the mentor.

Mentor log: The only common tool. The mentor log appeared to serve one function: To ensure that the mentors were meeting weekly with their mentees. In other words, it was more of an accountability piece than a document to build the mentor-mentee relationship. As Joan described the change in BTIM mentoring policy from the previous to the then-current year:

> And then this year, it went to not only do we meet with them [the mentees] but now they have to initial that you [the mentor] met with them. Because they are getting this money and apparently some people probably just made up, maybe, I don't know. Maybe some people just said they met with the teachers when maybe they didn't. I know [Sally] had a mentor last year that was supposed to meet with her once a week, face-to-face. I think maybe met with her twice all year. (Joan, mathematics mentor, Clementine Collaborative)

Hence, according to Joan's experience the mentoring log appeared to be a means to ensure that mentors actually met with their mentees.

Observational tools: The mentor's discretionary tool. Based on my observations of the mentor observing the mentee teach, there did not appear to be any systematic means to conduct the observations. In most cases, it appeared that the mentor had the choice of observation tools (if any were used). Three used observational instruments but only in the Clementine Collaborative did the science mentee have full knowledge of the tool, since it was the instrument used by administration. Another mentor, Susan, chose one from the common mentor book; and another, used the observational tool, required by her collaborative's project director.

Since observations were not required activity under TRC's administration, there was no common observational tool. Indeed, only one collaborative required in their mentor responsibility contract that the mentors conduct observations, complete and turn in an observational tool. Like the mentoring log, a formal observation tool, if used appeared to be more of an accountability piece than a document used to help the mentee improve instruction.

> I just write it because it's a requirement that I turn in. …But it's real simple. I just translate what I put on my paper over to the other one, and I turn it in just to prove that I did observe, and I write the date and time of the observation. But we were not required to turn them in last year. This year we are. (Angelica, mathematics mentor, Appleton Collaborative)

Based on my observations, the other two mentors, Mike, mathematics mentor from Big Bear, and Joan, mathematics mentor from Clementine—both concerned with maintaining the mentor-mentee relationship,–either did not use any physical tool or just brought paper and pencil, using what the mentor knew about administrative evaluations as a mental guide.

Although the mentor's role was defined within the "research-based" mentoring with varying degrees of specificity but no formalness in regard to specified observational tools tied to professional teaching standards, there was little or no role definition for the mentee to follow. Hence, at the time it appeared that the mentees were uncertain of their role and the role of the mentoring program.

Mentee's role: Undefined and uncertain. Although within BTIM educational code and mentoring materials there was a much more defined role for the mentor, there appeared to be almost no formal guidance for the mentee either within Texas Educational

Code, BTIM-specific documents or within TRC's accountability measures for the mentoring program. The only area that educational code addressed concerning the mentee was professional development. For instance, similar to the mentor, the mentee was to have some professional training in classroom management, data usage, and "topics related to pedagogy and student achievement" but there were no mentoring standards in regard to what is expected of them in the mentor-mentee relationship. According to the TRC official the roles and expectations for the beginning teacher were assumed to pass from the project director to the mentor and then, finally to the mentee. But these definitions did not seem to have been completely funneled down to the mentee via the mentor.

Although some mentee roles were stated in some of the research-based mentor training materials, there was no formal mandated BTIM orientation to BTIM for the mentees from either TRC or other state entities. The mentor trainings were by in large only for the mentors not the mentee. Indeed, in only the Clementine Collaborative were mentees allowed to come to the mentor professional development usually using their own (mentee's funds). BTIM monies, according to educational code were only to be used for mentor development, not the mentee.

During interviews the mentees appeared to be uncertain about their roles within the mentor-mentee relationship. In some cases the beginning teachers felt as though they were thrown into the mentoring relationship since there was no formal orientation to the program. Similar to the mentors, they did not seem to know of any "list" of mentoring standards—defining the mentoring roles. Even if the roles might have been explained to

them at the beginning of the mentoring relationship, mentees still seem to have some doubts on what they were. Mentees seemed to want to answer my questions but at times it seemed that the relationship in their eyes was not completely defined. In one poignant case, while probing about the mentee role the mentee stated flatly, "My role? I really don't know." (Helen, science mentee, Big Bear Collaborative)

The uncertainty of the mentee role appeared to have come from several sources: no formal guidance from orientation or documentation, and from the policy itself; BTIM funds were to be used for mentor development, not mentee.

No formal guidance: No orientation, no paperwork, no direction from mentor. Mentees did not appear to either have had a choice or a formal introduction to BTIM. The introduction, in some cases took on a "here's your mentor" format without much mentee input. Moreover, mentees did not recall receiving information that defined their role. Although some of the mentees received some books from their mentor, the books seemed to be about pedagogical issues such as classroom management. Moreover, the mentees seemed to know the grant stipulations for the program: the weekly mentor-mentee meetings and frequency of observations. In addition, some mentees did not receive any role definition from their mentor. In essence, it appeared that the mentees seemed to be at the receiving end of the mentee program without direction as to their roles as demonstrated by what occurred in the Appleton Collaborative.

> *Laurel:* Before you even started the mentoring program, do you have any idea what that would look like before…did the district or anybody, when they first approached you say 'okay, we have this wonderful program'. Was there any guidance that was given to you, like this is the program?
>
> *All:* Here's your mentor.

> *Robert:* Show up, and here ya go.
>
> *Debbie:* 'Cause I didn't even know we were having one and she was like, 'oh, yeah, she wants to meet with us' and I'm like 'who?' I had no idea I was even involved in it. (Mentee focus group, Appleton Collaborative)

There did not appear to be any paperwork, describing the roles and mentees were not always made aware of these roles and expectations from their mentors. As described by Sally, mathematics mentee:

> There wasn't like a piece of paper given to us that said 'here's the expectations'; it was like 'Mr. Smith meet Mrs. Smith, okay, bye.' And be on your way. So, it was up to us to figure out how our relationship was going to be, basically. (Sally, mathematics mentee, Clementine Collaborative)

The mentee it seemed needed to depend on the mentor for her role definition. But the mentoring roles did not seem to be always passed on to the mentee. Consequently, there appeared to be a little haziness with what the mentoring was about. Indeed, in one collaborative, the two mentee appeared to be a little uncertain of these roles.

> He didn't really explain my role. He mainly just told me what he was going to do and how he was going to help, and I liked that. He is doing his job, you know, and I'm just going to do my best. (Daryl, science mentee, Big Bear Collaborative)

No role definition meant for the other science mentee in this collaborative she did not have any expectations for the mentoring program. As Helen stated: "I guess it's not really different than what I expected because I don't think we had a conversation about what he was supposed to do with me, so I guess I haven't been let down or anything" (Helen, science mentee, Big Bear Collaborative).

Part of this uncertainty of the roles on the part of the mentee appeared to be due to how the BTIM grant was devised. The mentees were not in the know since there was no funding to get them knowledgeable about the roles and the program.

No designated funds for BTIM mentee development. Although this was not mentioned by the mentees during their interviews and focus groups, the manner in which BTIM was funded and its attended (policy) target was questioned by some of the mentors. The mentor focus group from Clementine Collaborative thought it ironic that the monies from BTIM were directed only at them and not at the mentees. Indeed, after the mentors had attended a BTIM mentor training on classroom management, this issue was mentioned.

> *Mentor1:* But also, the last meeting we had, didn't they say that the workshops, that BTIM would pay for. They would pay for the mentors but they would not pay for the mentees. To me that kind of leaves them out and the whole focus is them. I mean, if anything, it should be the reverse, they'll pay for the mentees and not for mentors because they are the focus.
>
> *Laurel:* It sounds like I'm hearing that maybe more support for the mentees in like professional development whether it gets paid by whoever, the district or what-have-you or for them to feel like they're being invited to these things?
>
> *Mentor2:* We agree with that is that the focus needs to be on the mentees because some of us that have been teaching long enough. It's like, ok, I always like to go to workshops and get something out of it but it's like sometimes we need the new people to get to the workshops. When I first started teaching and coming to [Region H], we're talking $50 for a workshop when it was mandatory. Now we're talking more expensive.
>
> *Mentor3:* And the other thing to be honest with you those of us who have been teaching for a while, a lot of what was said we have heard, a lot of what was done on the activities, we've done them, we've seen that. But it's the mentees that are brand new to teaching that haven't seen it all and haven't heard it all. And I'm not saying that we've seen and heard everything but I am saying that a lot of what was presented today I was familiar with. (Mentor focus group, Clementine Collaborative)

A few moments later, another mentor added:

> *Mentor4:* I think what they had said in the past was them saying something about maybe how the grant is written as far as it seems to be focused on the mentor. Like strengthen the mentor, give them resources and they will apply it to their

> mentees. I don't know if there's like an obstacle, how it's written, why they're not able allow the mentees to participate or give them more of them…I don't know. The grant that may have something to do with it. (Mentor focus group, Clementine Collaborative)

From my interviews and observations it seemed that mentors and mentees seemed to need to compensate for what they perceived as being no formal guide to their practice. Mentors appeared to rely on themselves or their formal monthly mentor training. However, mentees did not seem to have as big as toolkit to use to compensate for lack of mentee role definition. It seemed that this caused them to view the mentoring relationship as an informal, "go-with-the-flow" type relationship.

Mentor Compensation for Lack of Mentoring Standards-in-Practice

To compensate for the lack of initial and/ or continual mentor training, and specificity and formalness in mentoring roles in BTIM documents, mentor roles, seemed to be determined by: (1) The mentor's own teaching and formal mentoring experiences outside of BTIM; (2) the common BTIM mentor book; (3) the monthly mentor meetings; and (4) the mentor's disposition. Interestingly enough, these compensating activities were not mutually exclusive. For instance, in Big Bear Collaborative, one of the mathematics mentors who had extensive mentor training through the Milken Foundation's Teacher Advancement program credited the BTIM official who ran his mentor monthly meetings with defining his mentoring role.

During my interviews, the mentors did not mention any mentoring standards which they used to guide them. There simply was no official list given to mentors, but rather books or resources from which the mentors were to glean their role definitions. The mentoring standards were in the mentor training materials but these were not

necessarily given to the mentors to use. In some cases, the mentors felt as though their project directors trusted them and their teaching experiences to guide them as they mentored. Indeed due to the ambiguity, many mentors appeared to rely on their experiences and did not appear to be overly apprehensive in conducting their roles. Only one role appeared to cause some doubts: Observing without evaluating.

(1) Reliance on the teaching and formal mentoring experiences. One concept that influenced the mentors as they mentor was their own experiences in the classroom. The lack of direction seemed to be a concern for some of the mentors as they conducted their mentoring activities but this feeling seemed to be buffered by their confidence in their teaching knowledge, experience and expertise. But the influence of their teaching experience was strong, across the collaboratives. "The tools that I'm using…well, I go…I think it's from my own experience, my own growth" (Susan, science mentor, Big Bear Collaborative).

The use of their teaching experience was corroborated by another mentor:

> I think what they…of course, they expect us retired teachers that we use our experience and expertise to be able to do the observation and the only tool that I use is what I learned through my observations, PDAS and curriculum. I think those two are super important. (Angelica, mathematics mentor, Appleton Collaborative)

Some mentors appeared to have been influenced by their own previous mentor training, their experiences as a first year teacher, and being observed. Indeed, two of the mentors had extensive experience with mentoring that appeared to have shaped their mentoring roles. As Mike described what helped him to mentor, he appeared to put a lot

of faith in his experience as a mentor teacher through the Milken Foundation's Teacher Advancement Program (TAP).

> The primary thing that I went off of is kind of my own experience in what I know that good teaching looks like, and the frustrations and things that I know that new teachers are facing. But it was also supplemented very heavily with the information that [BTIM Official] gave us—that I shared with you there—and the TAP experience and—you know, I'd like to say that PDAS that some of that stuff helped too but to be honest with you, I think I probably relied on the TAP stuff more than I did the PDAS stuff. Just because the TAP stuff is a little more specific, and is broken down a lot more. (Mike, mathematics mentor, Big Bear Collaborative)

Many of the mentors had extensive mentor training from their district's in-house mentor training. One of mentors was also involved with her district's mentoring program concurrently with BTIM. She acknowledged using this expertise gleaned from these experiences and additional mentor training:

> **…**also the programs that were in here, I'm a mentor at [USupportTeachers] [her district mentoring program], as well, and we talked about supporting teachers and providing them with good feedback; being an advocate for them. (Susan, science mentor, Big Bear Collaborative)

Angelica, a mathematics mentor from Appleton, also discussed how being trained in her district's mentor training helped her**:**

> I was also trained in [SchoolHouse]—we had monthly meetings but we were pulled out. That was our training by [SchoolHouse] so we did have that foundation to fall back on and our experience as a teacher. (Angelica, mathematics mentor, Appleton Collaborative)

(2) Reliance on common mentoring book. For at least one mentor the lack of formal list of mentoring standards appeared to have been mitigated by the common mentoring book, *The 21st century Mentor's Handbook: Creating a Culture for Learning* by Paula Rutherford which was used in one of the collaborative's mentor training. BTIM

mentors were given this book as a mentoring reference. Some mentors appeared to use this as a resource book to thumb through and when asked what sources they used to help guide them three of the mentors cited this book.

According to the BTIM coordinator from Big Bear Collaborative who directed the monthly mentor meetings, it was "the" source and the basis for the mentor training. Indeed, Susan, a science mentor from Big Bear Collaborative who was experiencing formal mentoring program for the first time referenced this book multiple times in her interviews as a guide for her. It reaffirmed what her expectations and goals were in teaching. This mentor states:

> This book is thick. And as you're going through it you're like, this is very much in line with what I understand as best practices in education, things like that …It just has a lot of anecdotal information in it that just kind of carries with me as I'm approaching the mentor-mentee relationship. (Susan, science mentor, Big Bear Collaborative)

As a consequence, the common mentor book seemed to have been an important reference to compensate for the lack of mentoring standards. This was especially the case for Susan who was a novice formal mentor.

(3) Reliance on monthly mentor training. Although all three collaboratives were required to have monthly meetings or at least periodic meetings with their mentors over the course of the year, this training did not occur in practice: One of the collaborative (Appleton Collaborative) mentors only met to turn in required mentoring paperwork; another collaborative had trainings more devoted to teaching than supporting the mentor; only Big Bear Collaborative had monthly mentor meetings that seemed to support the mentors as they mentored. These meetings, according to some mentors

defined their roles in which they often credited the BTIM official for guiding them as they learned to work with the beginning teacher. As stated by one of the mentees from the mentor focus group in Big Bear Collaborative, the BTIM official played a large role in defining what they needed to do:

> This is my first year of mentoring and I would have to say I get most of my guidance from [BTIM Official], I would say seventy-five percent. And these meetings have been very helpful to me, but I've also read the mentor's handbook and a math coaching book and that's helped me a lot, as well. (mentor, mentor focus group, Big Bear Collaborative)

These meetings, which were run by a BTIM official, also became a mechanism in which the mentors learned their roles. Indeed, the monthly meetings which the mentors referred to as a "professional learning community" (PLC) not only appeared to offer structure to the mentors but gave them an opportunity to learn from each other. For instance, the mentors met and were given opportunities to problem-solve. As Mike, a mathematics mentor states:

> As far as the process goes, I've really liked this whole program and the process that we put into place here. So many times mentoring programs at schools are just kind of - you just show up the first day on campus and they tell you that you have a mentor and that mentor tells you where the copy machine is or something. This has been much more structured, and so I wasn't sure what I expected when I came in. It has definitely been more intensive than I thought it was going to be but that has been good. I think the results of that are showing. (Mike, mathematics mentor, Big Bear Collaborative)

But the structure appears to go beyond knowing the mentor role but hearing what other mentors are experiencing. As this mentor continues:

> …the monthly meetings which are a big help to me, because not only does [BTIM official] come in with some really good information for us, but to also get to hear these teachers that have been teaching 25 to 35 years. You hear some of the stuff that they are experiencing and get some of the suggestions that they have is real helpful. It is nice to know that some of the frustrations that some of the other

> mentors and mentees are facing so that I realize that maybe some of the stuff that I'm seeing and some of the frustrations that we are having aren't - are a little more normal than I thought they were. (Mike, mathematics mentor, Big Bear Collaborative)

This feeling was reaffirmed by Susan who credited much of her understanding to her role from these meetings.

> I had anxiety at first because I wanted to make sure that I did it right. After our first couple of meetings in the BTIM mentor meetings - remember, I told you we formed a little PLC and then it became very clear… (Susan, science mentor, Big Bear Collaborative)

In general, at Big Bear Collaborative the mentor monthly meetings seemed to be beneficial through the mentors' eyes since it gave them an opportunity to learn and problem-solve with their mentoring peers. It also seemed to at least for one mentor decrease some of the apprehensiveness about being a mentor.

(4) Reliance on mentor disposition: Seeking learning experiences. Much of what the mentor needed to know and do in some cases depended on the mentor's disposition to want to know more about teaching and mentoring. In some cases, the mentor needed to rely on themselves for learning more about mentoring since they did not seem to receive initial and/or continual mentor training, targeting their growth as a mentor. Indeed, many times it appeared that this learning was self-directed.

> Last year, they gave us different books to read and of course I read them, and I highlighted things in there. That still put the burden on you to do it. It wasn't like they sat us down and you do this and this. No, they didn't do that. (Joan, mathematics mentor, Clementine Collaborative)

Even with monthly training, some mentors took it upon themselves to ask for resources to learn more about mentoring. In the Big Bear Collaborative, mentors had

access to a mentoring library that a few mentors apparently used to supplement their monthly mentor training. As Susan states:

> Yes, it's a self-thing. They give us a list of what they had and I asked them for some and they sent them right away to me. (Susan, science mentor, Big Bear Collaborative)

Others seemed to know that they needed to reach out to others to learn about being mentor due to mentor-mentee mismatch or lack of mentor training, targeting mentor development. Mike, a middle school mathematics teacher was paired with two beginning science teachers. To compensate for his lack of science pedagogical knowledge, he felt he needed to get some more assistance from colleagues.

> The biggest challenge for me is just the fact that I'm not a science teacher. So, it's been real difficult for me to help [Helen] and [Daryl] out when it comes to presenting content and giving them ideas. I have to do a lot of research and call in a lot of favors from a lot of different people that I've met. (Mike, mathematics mentor, Big Bear Collaborative)

In summary, Mike, Susan and Joan appeared to have relied on their own disposition to guide them as they learned to mentor.

Mentee Compensation for Lack of Mentoring Standards-in-Practice

Mentees, on the other hand, unlike the mentor, did not have teaching and mentoring experience to compensate for the lack of role definitions. They needed to rely on either (1) their mentors for the mentor's role and/or (2) their own perceptions of what mentoring should look like. In particular, their own roles they appeared to rely on their own disposition for the quality of the mentoring and the type of mentor help received.

(1) Reliance on perceptions on mentoring and role of the mentor. Mentors in general seemed to have the capability to seek out learning experiences and/or rely on

their previous knowledge of teaching and mentoring to compensate for the lack of specificity in their roles. Most mentees, for instance appeared to have a general idea of the role of the mentor. Usually this person was someone who "helped you out". From my observations and interviews with mentees, there was no specific agenda or teaching concepts that the beginning teacher could refer to.

Daryl, for instance based on his experience working with his mentor, Mike perceived his mentor as someone who was there to support the beginning teacher.

> I guess that I… he would observe me, that he would share things that I did good, things that I could work on, things that maybe could be changed, and he always tells me things that I am doing good on, and maybe asks me why I do certain things. That's what I expect a mentor program to be, someone to help you out. (Daryl, science mentee, Big Bear Collaborative)

The concept of a mentor as someone to help, and give advice seemed to have cut across collaboratives.

> I just thought what a mentor was... was someone you can just go to if you need something and that's pretty much what I took it as and that's how it's been. And that's all I've known, so I don't know what difference to do. (Rosario, mathematics mentee, Clementine Collaborative)

(2) Reliance on mentee disposition: Being pro-active and "coachable". To compensate for lack of mentee role definition, it appeared that many mentees realized that the direction of the mentor-mentee relationship depended on them. They needed to know their issues and approach their mentor about them. If the mentor-mentee relationship was going to be successful they needed to be come to the mentor with their questions and issues.

> I just realized, pretty early on, that since there is nothing defined, it was just here's your mentor, she can help. It was like, okay I've got to go to her with questions, so I try… At first, my questions would be very general because I

> didn't know what I was really wanting, so I've just learned to … short and sweet, here's exactly what I need from you, what's the answer. …So, I just learned to ask questions cause it's not really set up for them to always come to you, you've got to go to them a lot of times. (Sally, mathematics mentee, Clementine Collaborative)

In some cases, the mentees realized that the quality of the mentoring depended on them; they needed to be pro-active in regard to what they needed to know as beginning teachers.

> As the mentee, I feel it's my role to not only ask questions but to provide feedback to the mentor and to give input as to how the school, your school day is going, or week or problems that should arise, you know, questions you may have, how do you deal with parents, how do you handle teachers you may not get along with, or students that you just can't get to work. Personalities, it's all about personalities and how in relationships and how you can maneuver through those relationships. As a mentee, the more feedback you give to a mentor, the more assistance that mentor can give to you. And it doesn't necessarily have to be about school. It can be about sometimes you just need time to vent. (Robert, science mentee, Appleton Collaborative)

Moreover, some mentees believed that they needed to be "coachable" to make the mentoring work.

> But every time that she does she does give me good…and I take it as, you know, this is what I still have got to work on and I try to implement it maybe the next time and the she comes in or just every day. I mean I don't take nothing to the heart or nothing that I'm doing that's putting me down. I take it more of being coachable, I guess. Whenever you're coachable, you let the coaches tell you this and this. This is what you've got to do. So, she's just trying to make me better. (Rosario, mathematics mentee, Clementine Collaborative)

Not having formal mentoring standards-in-practice appeared to have some repercussions for the mentor, mentee and on the mentor-mentee relationship. Namely, there appeared to be some doubts in conducting some of the mentor roles; and on the mentor's and mentee's goal for the mentoring program.

(Un)intended Outcomes of Lack of Mentoring Standards-in-Practice

For the mentors the lack of mentoring standards in practice seemed to have at least two outcomes for the mentors: Some mentors appeared to doubt their ability to mentor effectively their mentees especially in regard to conducting observations; and mentors seemed to have few if any formal professional goals or expectations for their mentees. Goals for their mentees tended to be more supportive and global than critical and specific despite the fact that most of the mentor-mentee relationships were going into their second year. Indeed, for some mentors there appeared to be a strong belief that the mentor-mentee relationship needed to be informal; if not, the mentees and mentors would not have a trusting and confidential relationship: Mentors could not be put into any type of evaluative role. Consequently, much effort appeared on the part of the mentor to build this relationship.

For the mentees, the lack of mentoring standards appeared to give them the impression that the relationship with their mentor was an informal one: No reflection or goals were expected of them. The relationship had a more of a "go with the flow" nature. Mentors, in some cases could be seen at the disposal of the mentee; if the mentee needed an extra pair of eyes or hands in the classroom, the mentor would oblige. They seemed to view their mentor as an emotional supporter, classroom helper and resource than as an educated critic of their teaching. Yet, despite not having any mentoring-standards-in-practice, the mentor and mentee roles appeared to more or less parallel that as evidenced in the common mentoring book and mentor training materials.

Some doubts in mentor's capability to mentor. The lack of mentoring standards, in practice seemed to cause some anxiety for some of the mentors, at least at the beginning of the mentoring program, especially in regard to observing the mentees. These doubts however appeared to be mitigated at times by the mentor's own perceptions of what a mentor program should look like and their experiences teaching and/or participating in other formal mentoring programs, usually offered in their own districts. The reasons for these doubts appeared to arise from two sources: Lack of formal (BTIM) mentor training, concerning conducting observations and a lack of "structure" of the mentoring program.

One of the mentors from Big Bear Collaborative seemed to have felt a little lost or uncertain about her roles since this was her first time mentoring: "I wasn't sure about the structure and the expectation of the program that I'm in. That was really the unsure part." (Susan, science mentor, Big Bear Collaborative)

However, two mentors specifically targeted their lack of knowledge of how to conduct observations as being a barrier to being an effective mentor especially since the mentors did not receive specific direction on how to conduct this activity under BTIM.

> I do worry about my observations because I don't know exactly what an observer looks for so is it enough with what I'm helping him with? Like today, if I had a little bit more training just on the observations you have to look for this, this and this in particular, then I could say, ok, remember they're looking for…be more specific. What I know is just what I learned through my teaching. That's all. (Angelica, mathematics mentor, Appleton Collaborative)

Joan, a mathematics teacher in Clementine Collaborative, did not seem to know at first what she was going to document when conducting her observations. However, she

seemed to be influenced by what she knew her administrators would be looking for in the classroom:

> Once I went in the first time or two, and then I know I'm looking for the content objectives, the language objectives, so pretty soon after that, I kind of know, hey, I'm going to look for this, I'm going to look for the vocabulary, because we have such a strong emphasis on vocabulary, and then I'm going to look for classroom management. And pretty much are you using the vocabulary? Are you teaching what you're supposed to be teaching in line with the scope or sequence? Basically, that's what I'm looking for. I'm not trying to be like their official evaluator. (Joan, mathematics mentor, Clementine Collaborative)

In general, for some mentors there was some uncertainty about their roles, especially in regard to conducting classroom observations.

Uncertainty of role definitions on the part of the mentee. Although it appeared that mentors and mentees knew that the mentor's duty was to meet weekly with her mentee, complete a mentoring log and if dictated by the collaborative to conduct observations, it seemed that the content of what was to be covered in the weekly meetings, the goal of the observations seemed to not always clear to both the mentor and mentee. Some of the mentors informed their mentees about the mentor's duties in the mentoring relationship; namely they would be having weekly face-to-face meetings with them and observing them on a periodic basis. But mentees still did not seem to have a clear role or clear expectations for the mentor as evidenced by Robert, science mentee in Appleton Collaborative.

> I have a lot of stuff to say because she does a good job. I don't know. I mean I would like to see her everyday but that's not possible. She's spread thin as it is…honestly, I can't because I guess I don't have expectations of what a mentor should be in the sense of, this is what she should is supposed to be doing. (Robert, science mentee, Appleton Collaborative)

Even after being in the program for a year, there were still doubts about what they needed from the program.

> I think my first year I had no idea what I needed from them. I just knew I needed somebody to hold my hand and help me through. Second year, still kind of wasn't too sure what I needed, my second year I think I tried to get more activity ideas from my mentor. (Sally, mathematics mentee, Clementine Collaborative)

Consequently, for some mentees there was quite a lot of uncertainty about what to expect from their mentors and what they needed from the mentor-mentee relationship.

Mentor's supreme goal: Build the mentor-mentee relationship. Although there did not appear to be common formal tools and guidelines to define the roles within the mentor-mentee relationship, the mentors appeared to be guided by one central theme: Build the relationship between the mentor and mentee. This goal of building the relationship between the mentor and mentee both inside and in some cases, outside of the classroom appeared to be the primary goal of the mentoring program in the eyes of the mentor. It seemed to have influenced how the mentor interacted with their mentee. In one case, the mentor attempted to do something positive for her three mentees once month; this could include taking them out to dinner to discuss school and other personal issues or buying Christmas presents. To maintain this relationship, observations by the mentor were to be informal, comments to the mentee were positive in nature and mentors did not use formal tools when working with the mentee for fear of making the beginning teacher uncomfortable. This mentor's goal also appeared to have shaped their relationship with the mentor; in a few cases, the mentees viewed their mentors as a familial figure.

The effect on BTIM mentor's duties: Observations and post-conferences. Having the goal of building the mentor-mentee relationship appeared to have affected the

nature of the two mentoring activities: post-conferences and the observations. Being conscious of what the mentee may be experiencing during the observations, the mentors seemed to have been very conscious of what they brought to their observations. For instance, one mentor did not bring pen and paper; rather he would observe without any source of documentation to put the mentee at ease:

> By being there. I've been doing this for almost 20 years and still when an administrator comes in my room to observe a lesson and I know the lesson's going good and the kids are participating and I mean we're just rocking it and then I'll see them drop their head and write something down, I'll look around the room, oh crap, what just happened? And it throws me off. Like I said, I've been getting observed for 20 years. I want to see the natural flow of the lesson. (Mike, mathematics mentor, Big Bear Collaborative)

Despite being guided by their own observation experiences, a few mentors did not want to bring in any type of form for fear of being seen as an evaluator by their mentees, hence changing the nature of the mentor-mentee relationship.

> It's in my head and I just jot down little notes on an index card. And the reason I do it on an index card as opposed to, I could take in a form and check it off, but that would put me more in a role of an evaluator and I want to be more of an encourager. (Joan, mathematics mentor, Clementine Collaborative)

Mentors seemed to be aware of "not pushing" anything onto their mentees and be cautious when talking with mentees after their observations.

> My own experience because I didn't want to push anything. I wanted to continue having that positive relationship. Even when I observed last year, I wanted to be very positive and say you did awesome but we need to do this this way - we need to change your approach. I had to be very careful how I approached them. (Angelica, mathematics mentor, Appleton Collaborative)

It is a tightrope that mentors appear to be aware of constantly when talking with their mentees especially after an observation did not appear to go well in the mentor's eyes:

> Sometimes, I feel like maybe, [Rosario, her mentee] thinks maybe I might pick on her a little bit too much because I do think she needs to work on classroom management. I've mentioned something like that almost every time I go in. I don't want her to feel every time I go in I'm criticizing her. I'm really there to help her. (Joan, mathematics mentor, Clementine Collaborative)

Moreover, as a guest in the classroom mentors were hesitant to give criticism for fear of disrupting the relationship but also since some mentors were aware that a beginning teacher might not know where they need assistance.

> I know in my first-years of teaching, I didn't know what to ask for. So, to very respectfully introduce my assistance in the classroom, you know what I mean, to make suggestions for lessons. (Julie, science mentor, Big Bear Collaborative)

Overall, it seemed that mentors did not want to give their mentees criticisms about their teaching for fear it would damage the positive mentor-mentee relationship.

The effect on mentor's roles: Being an advocate, encourager and resource.

When I asked mentors what they saw as their roles within the mentor-mentee relationship, most seemed to see their primary roles as being an emotional supporter, resource, and advocate. Few mentors seem to have seen coaching—helping the beginning teachers with content pedagogy—the manner in which they taught content as an integral part of their mentor role or even to develop the mentee's reflective skills. Although there were four mismatches: three in terms of content and one in terms of grade level, the mentors did not seem to think it was their duty as a mentor to coach their mentees. If this was the case, the mentor seemed to believe it was not their place to evaluate rather the mentor would suggest and not dictate. Being a resource seemed to take on the meaning of mentor as a supplier of materials. In one case, the mentor, a retired teacher from the district not only supplied resources to her mentees but shared information across the

district since she was the only middle school BTIM mentor. This information included how the students in the other schools were doing on the benchmarks, and what the other teachers were using to teach particular content.

A few of the mentors would have through their jobs as teachers or content department chairs been involved with the mentee in grade-level planning, professional development activities and/or in departmental. In other words, it seemed that even if the mentor was not their mentor they would have been actively working with the mentee during the course of their work day.

In the Appleton Collaborative, in particular the mentor Angelica, perceived her primary role as a resource to her beginning teachers.

> I think when I meet my mentees I always tell them, I'm here to help you. I am a resource, so use me in whichever way you want or need. I am a resource. I'm here to help you. If it's something that you just want to talk about and vent, I'm here. If it's something you want me to help you create, I'm here. If there's something you want me to prepare, help you with the lesson, I'm here. I am your resource. How can I help you? But if they don't ask me, I say, could I help you? Besides just being here, I say, ok, [Joe], what are you doing? How's it going? What has happened that you've been troubled with, or any problems that you have had, how can I help you? (Angelica, mathematics mentor, Appleton Collaborative)

However, in this mentor's mind being a resource meant she could only suggest and not direct her mentee even if he was struggling with a lesson. After observing her mentee teach a lesson in which it was apparent that he was not prepared for the class nor did he have the students' attention, she turned to me asked what is she to say to this beginning teacher since there is so much to say. She informed me that she "hates" this part.

> It's kind of difficult because I can see myself and I've told them, I'm here as a resource, I'm here as a support. So, I don't want to tell them, you did this wrong,

> wrong, wrong. No, I don't want to be negative. I want to be positive on the good things he had and suggest just things that he might want to improve on. Because I don't want him to say, oh my god, here I am, everything is wrong. No, he's a professional. He's the one that needs to realize what is it that I was not prepared for? What did I do ok by doing what I did? Because I didn't plan the lesson failed? Was I prepared? I asked him the first time and I could see this was the first time it happened to him. (Angelica, mathematics mentor, Appleton Collaborative)

Mike from Big Bear Collaborative, who was not matched according to content with his mentees, also appeared to be concerned with encouraging his mentees especially during the "bad" days.

> My role is primarily to let these guys know what to expect over the long run. To let them know that they may have a crappy day today or they may have a bad class, the kids may not perform well, or whatever, to keep coming back, because you're going to have the good ones along with the bad ones. Kind of view it over the long run instead of just looking at the immediate, what's in front of you. (Mike, mathematics mentor, Big Bear Collaborative)

After observing Mike talking with his mentee Helen about her lesson, I noticed that he appeared to follow a pattern when talking to his mentees. He tended to start out making small talk and stating the positive elements of the observation and then questioning his mentees. He stated:

> But what I always try to do is I try to come about some of the good things that I saw. Really try to start it off with some positive. And then kind of ask them questions on some stuff that I was concerned about instead of just really kind of jumping on it. I kind of want to hear their explanation kind of what they were thinking. (Mike, mathematics mentor, Big Bear Collaborative)

In the eyes of mentors such as Angelica and Mike, being a resource and a support mechanism appeared to be their primary roles within the mentor-mentee relationship, often downplaying their role as a coach.

The effect on the mentees: Seeing mentor as a caring individual. Some mentees appeared to be aware that the mentor was purposefully trying to build the relationship

with them. They also noticed that the mentor, in some cases would begin conversations with asking the mentee how he/she was doing both as person but also professionally. A few of the mentees used terms such as "mom", "uncle" or "friend" to describe their relationship with their mentor.

In one case, the mentor Angelica at the suggestion of the school dean in one of the schools that she mentored ended up participating in the weekly lesson planning with all the mentees. Consequently, she was able to collaborate on their lessons, give information on what the grade-level teachers were doing in other schools across the district as well as discuss individual issues with the mentees. I noticed the positive sides of this emphasis on building the relationship when after a post-conference with the mentor, Angelica both the mentor and mentee "high-fived" each other. Both were smiling. I asked the mentee about this moment: "I know. Sometimes we just high-five each other. We just do that sometimes. Like, yes, great job. We did good. We do get that kind of thing. We're just both goofy like that, I think" (Julie, mathematics mentee, Appleton Collaborative).

Indeed, from the mentee focus group in Appleton Collaborative all the mentees seemed to be in agreement; she, in their eyes, had it all. But they were most grateful that Angelica, their mentor seemed to really care about them as people not just teachers as this dialogue demonstrates:

> *Robert:* I don't really know how to compare what I believe a good or bad mentor is, I mean, Angelica falls into everything I believe would be a good mentor. I think the only thing is, I'm glad she's been more in the supportive in the emotional end and not just it's been all about 'here, let me give you some tips in the classroom.' She's been like 'hey, so what's going on, how's your day?' You know, she's really genuinely concerned about how you are as a teacher, and is more concerned about that than if you're teaching a certain lesson.

Mentor9: Yeah, cause that's the first thing she says when she walks in is 'how are you doing?', and she makes sure everything is okay first.

Julie: Yeah, and I know that that's one of the biggest things I love about her is that she's like 'how are you doing, how are your kids doing, have your kids…' If there's something, the missing work, oh gosh, the missing work, you know. 'Have they been turning it in? Did that work last week when you tried this?' And she's asking questions, and she knows where your struggles are and she's double-checking them and making sure we're getting better.

Mentor10: She always remembers your problems and what you're going through.

Laurel: So, she's combining that emotional part as well as an academic part?

All: Yes, absolutely.

In the Big Bear Collaborative, mentees appeared to be appreciative of how their mentor approached mentoring. As Daryl describes how Mike his mentee helps him:

> He's a former coach. We talk about sports quite a bit, but we know when to cut it off and talk about school. So, he's real down to earth. He doesn't tell me what to do. He just suggests. And that's what I like about Mr. [Mike]. He tells me the things that have worked for him. And that's what helps me. He's not telling me what to do. He's just giving me suggestions. (Daryl, science mentee, Big Bear Collaborative)

After I had completed an observation cycle with Mike, the mentor and Daryl, the mentee I asked Daryl about his relationship with his mentor. In particular, I wanted to know how the relationship with his mentor evolved into a "buddy" type of relationship.

> …you know, he's been my mentor pretty much since last year, so I've become more comfortable with him critiquing me or telling me the things I did well. It just kind of developed that way. He's always been very nice to me and the other teachers. He's known as the cowboy around here. [I smiled] He is. (Daryl, science mentee, Big Bear Collaborative)

Indeed, a few of the mentees put a lot of emphasis on defining their mentor's role as an emotional supporter. In some cases, they denoted their relations as familial ones. Two mentees, in particular viewed their mentor as mother or uncle.

> The mentor, I see him as kind of a father figure or like an uncle figure, you know, because he's really helped me settle down when I'm stressed out or when I'm having trouble and he's given me suggestions of things to do. (Daryl, science mentee, Big Bear Collaborative)

One of the mentees seemed to feel that she would be lost without the mentor, who taught the same grade and subject as the mentee:

> She's just always there. I don't what I would do without her, honestly. She knows what she's got to do, what we've got to do this year. She has everything planned out, mapped out since the years before because she's been doing it for a long time. We cling to her. She's like our mom. (Rosario, mathematics mentee, Clementine Collaborative)

In addition to doubts in the mentor's capability to mentor, uncertainty of role definitions on the part of the mentor, another outcome of lack of mentoring-standards-in-practice is that observations of the mentee teaching appeared to be downplayed.

Goalless observations: Downplaying of observations. Observations, though not a required activity under BTIM policy as administered by TRC, most project directors or BTIM officials demanded that their mentors observe their mentees on a periodic basis. However, the Texas educational code mandated that the observations of beginning teachers be guided by "standards-based assessments". However, formal observational tools were optional for most of the collaboratives. The instruments for the observations and post-conferences were solely left up to the project director to require and for the mentor to implement.

In place of guides and standards during observations and post-conferences, some mentors tended to look for items that administrators would look for in more formal observations such as the elements of the statewide teacher evaluation system, Professional Development and Appraisal System (PDAS) or in administration "walk-throughs". These items ranged from looking for school-wide teaching techniques or the evidence of content and language objectives. One mentor, trained through the Milken's Foundation TAP program appeared to use of these skills outlined from the observational training such as the type of questioning. However, the mentees did not appear to be aware of any specific criteria that the mentor was using during the observations.

Looking at the observations like an administrator appeared to take the pressure off the mentor; it is not the mentor looking at the mentee, rather it was the mentor-as-acting-administrator doing the observations. The observation, hence with some mentors seem to have taken the form of a mental checklist of "yes-no" items such as the appearance of content objectives in the classroom rather than a tool to help the beginning teacher to grow in content area instruction. More importantly, was that under no circumstances could the mentor be viewed as an assessor by the mentee.

Having observations driven by the mentor's perception on what was important in the lesson or taking on the role of administrator-in-absentia appeared to have a dark side for the mentees; namely, mentees in some cases appeared to rely on the mentor for determining the quality of their teaching. In other words, if the mentor determined something was "wrong", it was "wrong". There seemed to be an assumption by the mentees that the mentor was the expert and would give them the advice they needed to

improve their skills. However, it seemed that the mentee depended on the mentor for her opinion on her teaching.

"I am not an evaluator." Most mentors appeared to have some trepidation on being seen by their mentees as evaluators so they shied away from using any type of formal tool or even pen and paper during their observations. When an observation tool was used, it was often a choice of the mentor without discussion with mentee about any teaching goal or standard that the beginning teacher was using to improve their teaching. With one mentor, the completion of the observation tool seemed to be a compliance activity mandated by her project director.

Several times during interviews and informal conversations with the mentor, I often heard the mentor state emphatically "I am not an evaluator" especially after I had asked about the tools used for the observations. There appeared to be a delicate line between being constructive and being seen as an evaluator. All the mentors seemed to be conscious of not crossing this line and undermining the relationship with the mentee.

> No, no, no. Now, we do discuss it with them but we're not supposed to do it like an evaluator. We want it to be constructive. We want it to be positive. Of course, if we see something that needs to be worked on we need to tell them. We need to be honest with them. We're not there just to make them feel good either. But, you still want to build confidence in the teacher. We're not there to tear them down, but we do know that if you don't have good classroom management that that kills you on an evaluation. So, you want to point things out to the teacher if you know that they're doing something that needs some improvement because you want them to do the best as they can when they are evaluated. (Joan, math mentor in Clementine Collaborative)

The effect of not wanting to be seen as an evaluator appeared to have affected the manner in which they perform their duties. At times, there appeared to be a process that a

mentor went through when talking to the mentee during post-conferences, as exemplified by the following quote:

> So, I kind of like to start off and finish with something good and they kind of get that and I don't just want of sound critical or like I'm being mean or just picking on stuff with these guys. My role is not evaluator. My role as mentor [is] to help them figure how to better instruct their students and then secondly, how to do it in a way that's not amazingly stressful on them. (Mike, mathematics mentor, Big Bear Collaborative)

Mentors, in general, were very sensitive with how they discussed their findings about their observations. On the one hand, they wanted to give constructive feedback; yet, on the other hand, they did not want to cross the line in which they would be perceived as being an evaluator through the eyes of the mentee.

Administrator-in-absentia. Each mentor seemed to approach the observations with caution. Mentors, not wanting to be seen as evaluators, also seemed to worry about the impact of using any type of formal tool with the mentee during observations; this included the use of observational protocols and in one case, pencil or paper. Some of the mentors mentioned that when they observed the beginning teachers, they were influenced by their experiences with being observed by the PDAS; they also looked for elements that the district or school had been concentrating on as avenues for post-conferences. Often, these elements were yes/no items that did not require any judgment or evaluation by the mentor.

Thinking about the mentee, it appeared that mentors wanted to help their mentees to do well on the administrator's evaluation so they would try to hone in on items that the mentees would encounter with this type of activity. Although most mentors did not have training and/or experience with evaluating other teachers with the PDAS, they appeared

to conduct mock observations (although this was not stated by the mentors as such). Hence, the mentors needed to rely on their own experiences with being observed under the PDAS system.

> I'm not really trained to be that official observer so I see what is important in the classroom as far as I'm thinking of their PDAS and how they are going to be graded. (Angelica, Appleton Collaborative)

This mentor explains her role during observation with one of her mentees, a first year mathematics teacher but who taught physical education the previous year in the same school:

> But there were a few things, for example, vocabulary. So, he [her mentee] said, [Angelica], what did you think? I said, I think if you do what you're doing now on your formal PDAS, you're going to do very well. But, I don't see your objective on the board. So, we went over some of things. I said, what is it that you're going to do today? Do you have an agenda for the kids to do? I don't see it on the board? That's what they're (the administrators) going to be looking for. (Angelica, mathematics mentor, Appleton Collaborative)

The import of the administrator's evaluation of the mentee appeared to be at the forefront of the mentor's mind. As explained by Joan, a mathematics mentor from Clementine Collaborative:

> So, naturally, if I'm going in as a mentor, then I need to be seeing, are you doing what they're [the administrators] looking for because that's going to count when they have their evaluation. (Joan, mathematics mentor, Clementine Collaborative)

It appeared by taking on the role of administrator while conducting observations in the minds of the mentors they were no longer evaluators since they were looking for elements which they (not the mentor) would be looking for.

Mentee reliance on mentor's opinion on teaching. Mentees, through experience, appeared to understand that the observations would not be driven by any specific formal

tool. In at least one case, the mentee asked to have a mock formal observation; other mentees seemed to have learned this mentor role through working with their mentor. Since the mentors had the experience of being observed by administrators through PDAS and other evaluation tools, the mentees appeared to assign the mentor the role of helping them to prepare for their official observations**.** Indeed, some mentees appeared to have found it valuable having their mentors give them observational feedback as an administrator would.

> She'll come in and she'll watch me and afterwards we'll talk and she'll go, you know, you did good on this, you might want to do this next time, this is what they're [administrators] going to be looking for when they observe you. So just a heads-up type thing. Stuff like that, just, not necessarily what I'm doing wrong but more what I can tweak to meet…because she knows better what the administrators…when I've observed that they'll be looking for that I do. (Joe, mathematics mentee, Appleton Collaborative)

The emphasis by the mentor on building the mentor-mentee relationship appeared to be almost a total reliance on the mentor in regard to the assessment of the mentee's lesson. It was assumed that the mentor would use his or her experiences as a teacher to direct the mentee. Similar to the mentor's perception of their observation role, mentees appeared to assume that the mentor observe them teach, often as that of administrator and offer suggestions on ways to improve. It seemed at times that mentees had no role in the observation; from my observations, they did not supply lesson plans or offer teaching goals that they were working on professionally. Hence, some mentees appeared to rely on what the mentor's evaluation of their lesson, usually with no or little reflection on their part during their post-conferences.

For Rosario, there came from her a feeling of almost total reliance on her mentor, not just for lesson planning but also for understanding if she was fulfilling her duties as a teacher.

> More of a sense, if I'm actually doing what I'm supposed to be doing. Am I fulfilling the teacher, you know, is the student actually learning or are they just coming to class and not doing what you know, are they grasping the material, am I doing a good job explaining, am I not explaining very well, or do I need to give more examples, or what is it that I need to change to let the students know that they're learning and not just coming to class, that it's a blow off class, so that they're actually being involved engaged and that they're learning? (Rosario, mathematics mentee, Clementine Collaborative)

Sometimes, it seemed as though the mentee expected the mentor to tell her if she was doing something "wrong" in the classroom. There did not seem to be anything that the mentee could use as a reference point during the post-conferences.

> Anytime that she sees something that I could have done better I would hope that she would tell me. And she does. I can't think of a time that she didn't tell me her full opinion. If she felt like I did something wrong, like with the area and perimeter, I could have brought in real world situations and she brought it up, you know what I mean? (Julie, mathematics mentee, Appleton Collaborative)

One mentee commented during her post-conference interview that she was not basing her observations necessarily on what she wanted to work on as a teacher, but rather on what the observer (her mentor) was looking for within the lesson. She also viewed the post-conference as a "conversation"; however, she tended to hedge her responses with "I guess' as though uncertain about the goal of the observations and post-conferences.

> I guess, have a conversation about things, I mean I like to know what he likes and…he's never made me feel like I was doing anything absolutely terribly wrong. If there's things that he sees that maybe I could do differently. I know we discussed more pushing them with the questions, the questioning, which I guess I wasn't (Helen, science mentee, Big Bear Collaborative).

Overall, the mentees seemed to be unclear about the purpose for the observation cycle. They also appeared to depend heavily on the mentor's opinion of their lessons.

Global mentoring goals: "Get better". From my observations of the mentor observing the mentee teach, there did not appear to be a clear-cut teaching goal, directed by the mentee. Although a few of the mentees were aware that one of the goals for BTIM was to improve teacher retention, it seemed that mentees did not offer any specific goals for their own development. They knew they had a mentor; they would get advice and help. If mentoring goals were stated they tended to be general. It appeared that mentees themselves had no goals other than "to get better".

Indeed, the main goal according to many of the mentees for the BTIM program was to make the mentee a "better teacher" but without specific direction on what this means or even how it is measured: "I wouldn't think of any specific goals, I mean just your general goals as being a teacher and you know that person's there to help you out." (mentee, mentee focus group, Clementine Collaborative).

As one mentee states "getting better" means having better behavioral management skills.

> To get better, 'cause I know that if you're able to manage your classroom better then you're able to send out your lessons and your styles of…it's just easier to manage everything and you can get the behavior down. (mentee, mentee focus group, Big Bear Collaborative)

Above all, it seemed that without formal mentoring standards-in-practice, mentees, in particular viewed their relationship to their mentor as an informal one: In most cases, it seemed that they got out of the relationship what they wanted. Mentors seemed to believe that how they conducted their mentoring activities, especially their

observations, had the potential to change the nature of the relationship. Although it would be difficult to determine what came first—the informality of the mentoring activities or the informality of relationship—there appeared to be certain mentoring lines that mentors could not cross.

The informal nature of the mentor-mentee relationship. The lack of the standards-in-practice appeared to have created an informal relationship between the mentor and the mentee especially since the mentor did not appear to demand anything from the mentee in regard to the mentoring program. It seemed that the expectations between the mentor and mentee were that observations would be informal; the mentor would watch the mentees teach and offer suggestions. The mentee would decide to take the suggestion or not. The goal of the observations appeared to be either to get the beginning teacher ready for the official observation by an administrator; assist the beginning teacher to get their students ready for the state standardized test; or to give some global suggestions on how to improve their teaching. From my observations, I saw that mentors in the classroom were not always observers; sometimes the mentee used them as another set of hands in the room, or a means to get more classroom control. Although the mentees would state the goal of observations were to help them get better as a teacher, none of the beginning teachers seemed to be involved with what this process meant: What transpires is what transpires.

What was interesting is that according to few mentors that the relationship had to be informal, otherwise mentees would not trust the mentor. Issues of trust and confidentiality were strong elements in at least one of the collaboratives so much so that

one of the project directors did not want me to observe the post-conferences since these activities were to be confidential. Mentors were not to divulge to administrators what they were working on or discussing with their mentees. Moreover, at least from one mentor's perspective she could not tell an administrator that she believed that the mentee would benefit from observing other teachers since this would destroy the confidential nature of the relationship.

Issues of trust and confidentiality within mentor-mentee relationship. Some of the mentors commented to me during either focus group or after observing a post-conference that they view the mentoring as "informal" and this informalness gets reflected in their mentoring duties especially in regard to the observations. Indeed, the presence of any tool in the mentors' minds would have changed the dynamic of the observation from an informal to a formal activity; hence changing their role from an encourager to an evaluator. Trust between the mentor and mentee would have been destroyed since the mentee would not feel free to be honest about what they needed from their mentors if they thought the observations were formal events.

Some of the mentors appeared to put a lot of time and effort into building the trust with their mentee. Without it, mentees might not get the support that they need. As Mike, mathematics mentor describes a situation about his science mentee, Daryl.

> I had a little trouble with [Daryl] at the beginning because I had the feeling that [Daryl] kind of was afraid he was assigned a mentor because we thought he was bad. So, I kind of had to break through that. There was an issue that came up with some other people on campus that initially, I was asking [Daryl], can I help you out with this? And [Daryl] was like, no, I'll take care of it. And finally, one day it just kind of came to a head and I said, look man, I'm here to help you out, ok? You're a great teacher. We want to keep you on this campus. If there's some stuff going on that's making you uncomfortable and if things are getting in your way,

> let me know, let me help. And I think once we got through that then things have really gone very well.

After observing both the mentee teaching and the post-conference that followed Susan commented on the "delicate" nature of the mentor-mentee relationship. She needed to do a lot of informal walk-throughs in order to build the trust with the mentee. As she states:

> Again, the form was not something I was trained on but it was given to us along with the reference text, the book. And the book instructs about exactly that process to make sure that you're definitely doing a lot of informal visits and walk-throughs in the classrooms, that they're comfortable so that the mentee just gets comfortable with you being there and that way by the time I sat down to do something or actually am writing because you see somebody in your classroom writing on paper, it's like ahhh. By the time I sat and did that then he trusts me and he knows I'm not there to evaluate him for anything. (Susan, science mentor, Big Bear Collaborative)

This idea of building the trust with the mentee appeared to change the nature of the observations. One mentor seemed to view this informalness especially with observations to be imperative: If not, mentees would not trust the mentor.

> Also our observations with our teachers, our mentees, to me it has to be more informal than what they are getting with a PDAS - if not, it would be very difficult to really gain their trust and their confidence that we are not there to score them or anything - it is just an informal observation that we can use as a tool to sit with them and kind of discuss - look - I think you did a great opening - your activities but you lacked management, or you know, - it helps them. It is more of an informal observation. (mentor, mentor focus group, Appleton Collaborative)

The mentor-mentee relationship seemed to be viewed by the mentee as an informal one especially since the mentor did not appear to demand anything from the mentee in regard to setting mentee teaching goals and aims. The informal nature of the relationship appeared to influence the mentee's perception of the mentor. In most cases they saw their mentor as a caring individual someone who would help them if they got

stressed out or needed an opportunity to vent about what was transpiring for them. Indeed, in many cases the building of the relationship appeared to supersede their need to improve as teachers in a concrete fashion. The informality appeared to give the mentor-mentee relationship "go with the flow" flavor without any formal goals or aims.

That being said, some of the mentees appeared to like the informalness of the program—with no role definition or expectations so they could make the program what they wanted it to be. In other words, no demands were made on the mentee in regard to the mentoring activities. Part of the informalness seemed to be due to the nature in which the mentoring program was constructed, as evidenced by Robert, science mentee: "I mean, it's a very informal relationship, nothing like I have to sign off or anything or vice versa, or do reports, reflection or anything or that sort. It's very informal" (Robert, science mentee, Appleton Collaborative).

The lack of guidelines appeared to reinforce the informal nature as one mentee states she was just going to go with the "flow": "I don't think there's a guideline set as far on paper or anything. I just know that we're kind of just going with the flow of it" (Rosario, mathematics mentee, Clementine Collaborative).

Interestingly, one mentee felt as though she had to earn the trust of her mentor. As a new teacher felt that her mentor had perceived the mentee as a threat. It took time to develop trust.

> As we bonded into her trust, she trusted and there was more trust between us, and I wasn't gonna hurt her, but there was something that happened, I guess, between them, between administration and that mentor, and just different things, just some history behind it. I had a bigger picture; I had a paradigm shift, so I was able to work with that and just earn the trust, 'I'm not here to…I'm not a threat.' Maybe

> she didn't feel that way at all, but that was the vibe I was getting. (mentee, mentee focus group, Clementine Collaborative)

All policies function within several different environments. One, in particular, the high stakes testing environment appeared to have some ramifications for the mentor roles and the mentoring relationship. Namely, issues of time and the pressures of accountability especially on the mentors who were also practicing teachers seemed to shape these mentoring roles.

Mentoring within a High Stakes Testing Environment

The year of this study Texas schools were transitioning from the former statewide content assessment, the Texas Assessment of Knowledge and Skills (TAKS) to the State of Texas Assessment of Academic Readiness test (STAAR), purported to be a more rigorous examination than the former assessment; it was rumored to have a greater focus on content vocabulary as well as having high-order thinking questions. As noted by one of the mentors:

> This test is going to require so much vocabulary, higher thinking questioning. You can't just come in and say, ok…like I have with one of my mentees, he drew an angle, he said, ok what kind of angle is this? And he said, obtuse, ok, then he moved on. He could have said, why? Tell me why it's obtuse. What are the measures? So, that's where they really have to get the kids thinking and expressing. Because I understand there's going to be a lot of open-ended questions so the kids have to be a little bit more understanding of what's going on not just tell me a cube but why? (Angelica, mathematics mentor, Appleton Collaborative)

One science mentor from the study summarized the high stakes testing environment: The district curriculum was to be aligned to the state's content standards (Texas Essential Knowledge and Skills or TEKS) which turn were to be aligned to the statewide assessments from which schools and districts received their statewide and

federal label under No Child Left Behind Act of 2001; it created some pressures on the teachers.

> Our curriculum is the TEKS. We follow the state curriculum, the state standards and then districts adopt this thing called C-Scope in an effort to standardize the approach and to increase consistency in classrooms across the districts. … And then, of course, teachers struggle to stay in alignment with it at the same time making their instructional decisions. (Julie, science mentor, Big Bear Collaborative)

Beginning teachers, in some cases felt themselves struggling to keep current with the district curriculum and readying their students for the upcoming assessments:

> Like the curriculum, it's like you have this much, this much, this much and if kids struggle on something they have to have more days when we have to take some time from something else so we're just not going to…I mean it was a struggle to get caught up to where we started benchmarks today. We had to be at this point by the benchmarks. (Joe, mathematics mentee, Appleton Collaborative)

The irony of the lack of mentoring standards-in-practice is that all the mentors and mentees appeared to have been aware of the standards-based environment in which they taught. All teachers needed to follow the district-approved curriculum, give benchmark assessments and analyze student (achievement) data. Indeed, one mathematics mentor who had recently retired knew that she needed to keep abreast of the new district curriculum and assessments to be a resource to her mentees. With the changing of the state assessment to a supposedly more demanding high stakes assessment, this mentor felt as though it was her duty to get more training both as a mentor and as a teacher.

> I have to stay on top of things. I have to just continue growing myself because if I don't stay on top, for example, now I've done a lot of reading, I went to camp this past summer. I wanted to see what were the latest things out there for the new tests, what are the requirements, what are the new TEKS, what are the new

> standards? So, I have to stay on top of things to be able to help them. (Angelica, mathematics mentor, Appleton Collaborative)

Indeed, she often referred to herself as the resource person for the STAAR—gathering TAKS release questions and compiling them for her mentees and asking the mentees how they are going to present the material.

> Even as they're doing their lesson. I said, remember, we've got to focus on vocabulary. So, it's ok to do the basic, the skill, but then how are you going to implement it? How are you going to apply it? Is it a word problem? How is the word problem going to look like? What I did last week for them, there's a bank of questions that are called the TEK questions that are online and in the release test. (Angelica, mathematics mentor, Appleton Collaborative)

Due to the testing environment, some mentees had to adjust to a new standardized district-adopted curriculum (e.g., C-Scope), to implement school-wide teaching strategies and/ or follow a new teaching schedule to ready their students for the spring statewide assessments. These readiness procedures based on my interviews appeared to have put additional stress on the beginning teachers. Some mentees especially those in testing grades felt the pressure to perform.

> I feel like we are teaching to the test. Period. We do. And there's no other test. In today's No child Left Behind day and age, we are teaching the test. Period. And if teachers and principals and if anybody says otherwise, they're kidding themselves. Because it's all about these state mandated tests. It's like the Super Bowl, every year. (Robert, science mentee, Appleton Collaborative)

Whether there was a mentoring program or not, mentees seemed to understand the challenges of working in a high stakes teaching environment; in some cases a few of the beginning teachers appeared to believe that their jobs depended on their student test scores. There seemed to be a high level of stress about the assessments since they are tied to their continual employment.

> One of the biggest challenges here is with the accountability ratings, as they call them, which mainly is focusing on standardized testing, is to just like, there's a lot of pressure for testing and making sure the kids pass the standardized test. Sometimes you're made to feel like that's your only job is to get them to pass that test. So, I think there needs to be clear expectations about that, but also I think first year teachers need a lot more support than what the testing scores mean and they need more leeway, I guess, in terms of being able to achieve whatever goals it is. I guess sort of the impression I get now is if your kids don't pass the test then you're done. (Justin, science mentee, Big Bear Collaborative)

Angelica, a mathematics mentor, also witnessed the stress of the beginning teachers trying to cover the district curriculum in preparation for the STAAR assessment.

> The biggest challenge for the new teachers, they get overwhelmed when they see, oh my goodness, I have this curriculum to follow, I have a new test and so it seems they worry about everything instead of putting things in perspective. (Angelica, mathematics mentor, Big Bear Collaborative)

The high stakes testing environment appeared to influence the mentor-mentee relationship in several pragmatic ways. For mentors who were practicing teachers the timing of the observations and face-to-face interactions were crucial: Mentors did not want to lose instructional time mentoring. Time needed to devote to the testing and preparing for the testing appeared to have some ramifications for the intensity and depth of the mentoring program. As time grew close to the statewide testing the mentoring duties in some cases appeared to be more acts of compliance than activities that supported the mentee. Moreover, there appeared to be a battle of mentoring goals. On the one hand, mentors wanted to build the confidence of their mentees; yet, on the other the mentors knew that the success of teaching and of mentoring would mean higher student achievement on the statewide content assessments. Interestingly, most of the mentees did not feel the high stakes testing environment affected their relationship with their mentor-time, however and following the mandated curriculum in some cases became the issues.

Limit on the mentoring relationship: Issues of time. Due to the pressures of the high stakes environment, mentors seemed not to want to leave their classroom unless they were not losing instructional time with their own students. Consequently, observations and post-conference tended to occur during the down-times for the mentor—preparation periods, advisory periods, and regular, non-high stakes testing days. The mentors, although not always verbalizing acknowledging the stress of the high-stakes environment and leaving the classroom, I did see that the mentors who were practicing teachers trying to balance meeting the needs of BTIM program that the demands placed on them in the classroom. As such observations tended to occur when the mentor had down-time; for instance, their students were taking a quiz and there was an instructional aide to cover as the mentor went to observe the beginning teachers. The lack of time for practicing teachers was summarized by Mike:

> The biggest challenge is kind of like the time issue. With them - there is me and one other girl that does this and we are both full-time teachers too- trying to balance between their time and my time and still - the bottom line is student achievement. How can I balance that for all three of us and still make sure that my students don't suffer for it. The number of times that they want us to meet with them per semester gets a little tough to fit all those in sometimes. We find a way to make it happen - luckily [Helen] and [Daryl] have been real flexible so it was easier to work with them. (Mike, mathematics mentor, Big Bear Collaborative)

Helen, Mike's science mentee, noticed that as time drew closer to test time, it seemed to have influenced the frequency of Mike's observations.

> He was coming in a lot more at the beginning of the year, I think we've all been very busy and he's got the testing coming up, so… I don't think I've seen him observe me this semester. I could be wrong, but I don't think so. (Helen, science mentee, Big Bear Collaborative)

The lack of time due to time diverted to preparing for the STAAR appeared to have been felt by mentees as well. When discussing the differences between first and second semester and the time allotted for the observation cycle and the weekly face to face interactions, Sally, the mathematics mentee commented:

> *Sally:* …Like the first semester, not only would we talk about what was in the book, but that would spark questions that I had but now it's kind of like we're just saying to get it over with so we can move on, then go back to what she does what she needs to do and I need to do.
>
> *Laurel:* Oh, you mean with the post-conference, it's just like let's get it done as quickly as possible? You're doing a great job, wing, bang, thank you ma'am. Because she said I think sometimes that you sometimes may not even meet for a post-conference or you do it maybe after school or maybe during lunch or maybe an email?
>
> *Sally:* Yeah. And can we just fit it in so we can say we did it and then move on.
>
> *Laurel:* Ok. And how do you feel about that just sandwiched in?
>
> *Sally:* Sometimes I'm ok with it because I'm out of time. And then other times, I'm like, well? Like when you asked me these questions, it really makes me think, I guess I'm really not getting anything out of it now. I mean, I was at the beginning of the year but now I'm kind of just on… (Sally, mathematics mentee, Clementine Collaborative)

In one case, it seemed that the observations were not even transpiring since the mentor was in a school that was not doing well on the statewide assessments, and they could not afford to be out of the classroom to observe. As summarized by a mentee in a low performing school:

> Now we've bonded quite a bit from last year to now, and yes she's more involved with me in that respect. Not that she wasn't last year, I don't want to say… it was just because of the circumstances and we were in a situation where we're all pressed for not being recognized, or something like that, because science, it was just a real stressful year…this year is even worse. (mentee, from mentee focus group in Clementine Collaborative)

The mentees who were in testing grades appeared to feel the pressure too; more tasks were being placed on them the closer the time came for the standardized testing.

> The training itself was after school but there's been other stuff too…like making up STAAR questions because TEA hasn't really sent anything or learning how to write STAAR questions. That's been during our conference period. So, I haven't been able to use that conference period to go talk to [Joan], to talk to my mentor. (Sally, mathematics mentee, Clementine Collaborative)

The high stakes testing environment seemed to have created pressure on both the mentors and mentees; it affected the amount of time, for instance that the mentors had to mentor and changed the feel of the mentoring duties.

The implicit-explicit mentoring goal: Student achievement. When asked about the goals for their mentees, many mentors acknowledged that they wanted their beginning teachers to become more confident teaching; hence, they framed their comments in ways that focused on the positive aspects and gave suggestions for the areas to improve. Student achievement was an important goal to reach with or without a mentoring program. Some of the mentors appeared to make a conscious effort to make the mentee's aware of the power of these assessments.

For others it seems as though the accountability environment is one that is implicit in everything that they do within the school environment. Hence, it is there when they teach or perform their duties in the school and as they mentor.

> The primary thing with the mentorship, the grant, is that we're documenting what we're doing and then it's going to come down to test results. Part of what I hit on, I probably didn't get into enough, was that [BTIM official] really tells us to push for these guys is look at their bottom twenty percent. So, when it comes test time and they come back with benchmarks, unit tests or whatever, we'll talk about the good kids and talk about the how the overall thing went, but then we'll also take some special time to look at their bottom twenty percent and maybe talk about

> some strategies that could have gone a little bit better, that we could help those kids out with a little bit. (Mike, mathematics mentor, Big Bear Collaborative)

Although from my interviews it seemed that the goal of raising test scores was more in line with the principals' goal for the mentoring program, some mentors expressed that the ultimate goal was to retain teachers who could elevate the test scores.

> Because we want the students basically it comes down to doing well on a test. Unfortunately, that's more about the STAAR test now than it is about other things. But that's just the way it is everywhere. I think that's the goal. (Joan, mathematics mentor, Clementine Collaborative)

Interestingly some mentees did not discuss the STAAR with their mentor since the mentor-mentee was not matched according to grade-level or there was no time and space in which to discuss this worry with their mentor. Consequently, discussion of STAAR did not come up during the mentee-mentor face to face meetings.

> Not during our meetings. We pretty much keep it to either the book or to how she saw my lesson went. She and I really haven't talked about the STAAR. Usually I'm talking to the other seventh grade teacher about the STAAR. (Sally, mathematics mentee, Clementine Collaborative)

Ironically, this mentee also did not see the high stakes environment impacting the relationship.

> I don't see it impacting the mentor relationship too much. It's impacted the way we're having to teach because we've got to still teach the basic math concept, but the STAAR is going to be more word problems so we're becoming kind of reading teachers as well, teaching them how to read. So, my teaching has changed a little because of STAAR, but I would not say that the mentor relationship has changed. (Sally, mathematics mentee, Clementine Collaborative)

In some cases the high stakes testing environment seemed to not have impacted the mentor-mentee relationships since the mentor and mentee taught a different grade

level or content area. But mentors seemed to be very aware that how their mentees' students did on these examinations could have a potential impact on their job.

Conclusion

Overall, it appears at least on the surface that mentoring standards did not seem to have directly impacted the mentor-mentee relationship since the mentors and mentees seemed to believe that there were no mentoring standards to guide them. Indeed, when the question arose about mentoring standards during the individual interviews, the mentors and mentees appeared to be a little taken back since there was no "list". That being said, mentors across the collaborative seemed to follow one principle: Build the mentor-mentee relationship. This guiding element appeared to have affected how they conducted their mentoring activities especially the observations: Comments about teaching became suggestions; formal observation tools tied to any professional teaching standards were non-existent. Indeed, in most collaboratives the choice of tools was at the discretion of the mentor. In general, there seemed to be a down-playing of observations in fear that it would change the nature of the relationship between the mentor and mentee. The mentors seemed to view their roles as resources, emotional supporters and not evaluators. Building a trusting and confidential relationship seemed to trump any means in which the mentor and mentee could work together for the benefit of the beginning teacher's instructional development in which the mentees was in control of their own personal and professional development as teachers.

Part of the lack of guidance from mentoring standards-in-practice appeared to have been a reflection of the differences in the mentor training which contained the

mentor role definition(s). In one collaborative, mentors received neither initial nor continual mentoring support. In another, the mentors seemed to have had some initial training, but the training was so long ago that the mentor did not remember what the training covered. Moreover, the continual mentor training appeared to have been geared towards beginning teacher and not the mentor's needs. Only one collaborative appeared to have both initial and continual mentor training. However, with or without formal BTIM mentoring training most mentors appeared to have depended on their own teaching knowledge, expertise and other more formal experiences with mentoring to guide them; in some cases mentors needed to learn how to mentor on their own through self-study of mentoring books without reflection or input from other mentors. In one collaborative it seemed that the BTIM coordinator who oversaw the mentor training had enormous sway on mentor role definition.

Mentees, on the other hand had no formal avenue from which to compensate for the lack of mentoring standards-in-practice. They needed to either depend on their mentor and/or their own perceptions on mentoring to determine how to enact their roles. Mentees soon realized that the mentor-mentee relationship would be informal with no requirements on their part. The relationship was interpreted as an informal, "go-with-the-flow" type of relationship. Interestingly, some mentees developed a close relationship with their mentor, referring to her or him as a "mom" or "uncle". In one collaborative, the mentees appeared to perceive their mentor as having it all: emotional and the academic supporter. Part of this deep connection may have been due to the fact that the mentor had an additional duty: participation in the preparation of the weekly lesson plans. Moreover,

since this retired mentor was in charge of all the middle school mentees across the district she became a conduit of information about the successes and challenges that the other teachers were experiencing as well as being a resource about what other schools were doing.

The high stakes testing environment appeared to have impacted the mentor-mentee relationship. Time became an important element since practicing teachers did not want to lose instructional time to mentor. Mentees also seemed to be conscious that as time drew closer to the statewide assessments there was less time to meet and be observed; at times, the observation became a compliance activity. Moreover, there appeared to be some conflicting goals; on the one hand, some mentors felt that their responsibility was to build the confidence level of their mentee; yet, on the other hand mentors seemed to know that the beginning teacher's students would need to do well. For one mentor, this meant that she needed to be "on top" of the new standards and curriculum for the STAAR, the new statewide content tests which were purportedly to have a higher rigor than the TAKS, the former accountability assessment.

Ironically, despite the lack of a formal list that defined the mentoring standards, both the mentors and mentees roles appeared to parallel some of those roles within BTIM specific and non-specific documents. In essence, the mentors needed to focus on building the mentor-mentee relationship: keeping comments positive and observations informal with few formal tools. Although one of the "research-based" training programs listed that the mentor was to be a facilitator of reflection skills, in my observations this did not appear to be the case. Most mentors tended to dominate the conversation, usually

focusing on classroom management issues or those superficial elements that an administrator might observe through a “walk-through”. Some mentees seemed to realize that they needed to determine the direction of the relationship by bringing their issues and their questions to their mentor. That being said, some of the mentees seemed to have had a great personal and professional bond to their mentors.

CHAPTER 5: DISCUSSION & POLICY RECOMMENDATIONS

With the "greening" of the teaching workforce (Ingersoll, 2012; Ingersoll & Merrill, 2010) and the reported loss of beginning teachers especially in urban and rural schools within the first three to five years (Darling-Hammond & Sykes, 2003; Ingersoll & Perda, 2009, 2010; Smith & Ingersoll, 2004), comprehensive induction programs are often portrayed as a policy solution to improve retention, increase teacher capability and ultimately, increase student achievement (Achinstein & Athanases, 2006a; Ingersoll, 2011; Olebe, 2001). Indeed, 27 states have some sort of policy supporting new teachers in various types of induction and mentoring programs (Goldrick et al., 2012). Moreover, over the last two years over 70% of beginning teachers were participating in some sort of induction or mentoring program (Ingersoll, 2012). Despite the widespread use of induction and mentoring programs, there are few studies that examine the components of a "successful" program (Ingersoll & Strong, 2011). Indeed, there is a great variety in the components of these induction and mentoring programs from how they are governed to how they are funded (Furtwengler, 1995; Smith, 2007; Wang et al., 2002). In particular, mentoring, a central component of such programs is a concept that is not only under-conceptualized (Schwille, 2008) but has not been systematically broken down into the components which form and support a successful mentor-mentee relationship, outside of the importance of mentor-mentee subject matter and grade level match, and having a common planning period (See Smith & Ingersoll, 2004).

Induction and Mentoring Program Standards

Standards although acknowledged to be value statements (Heibert, 1999), based on consensus and not scholarship (Murray, 2001) are often seen as starting points to which curriculum and assessments are aligned within an accountability system designed to hold teachers, schools, and districts responsible for student achievement (Cohen & Hill, 2001; Cohen & Moffitt, 2009; Cross, 2010; O'Day & Smith, 1993). Standards often serve two primary functions: offer "instructional guidance" (See Cohen & Hill, 2001; Cohen & Spillane, 1992) and provide a bar for "professional performance" (Carver & Feiman-Nemser, 2009; Stanley & Stronach, 2012). These same roles occur within induction and mentoring program: Standards serve to give instructional guidance for the mentor and mentee, in terms of what the mentors and mentees need to know and be able to do both within the classroom and within the mentor-mentee relationship; in addition, these mentoring standards may be tied to performance standards which are often based on professional teaching standards. In the latter case, these performance standards are often linked to "standards-based" formative and summative assessments of beginning teacher's instructional capabilities or "standards-based professional portfolios" (Carver & Feiman-Nemser, 2009).

Program standards are a component of induction and mentoring programs. Several states such as California, Connecticut and North Carolina have comprehensive formal state program standards for their induction and mentoring programs; these standards usually stipulate the goals, roles of the participants and the districts, as well as performance goals for the beginning teacher. The latter element is often linked to state

teacher professional standards or professional teacher organization's (e.g., The Interstate Teacher Assessment and Support Consortium**,** InTASC) teaching standards. The completion of these programs by beginning teachers is a requirement for earning a professional state teaching licensure. Often these mandated beginning teacher induction and mentor programs are multi-year programs, designed around building the mentee's professional teaching practice. Other states such as Texas have voluntary induction and mentoring programs that are not linked to state teaching licensure; often the policy aim of these state programs is the retention of the beginning teacher.

Mentoring standards. The New Teacher Center (NTC, 2011) has identified three types of program standards: Foundational, structural and instructional.[10] Mentoring standards[11] would fall under the structural and instructional standards components since they not only define the mentoring roles but also give guidance to the types of tools used to support the mentor-mentee relationship in the enactment of these roles (e.g., conducting observations using a formative standards-based assessment tool). However, mentoring standards have not been examined to see how the interpretation and enactment of these standards affect the mentor-mentee relationship. The purpose of this study is to bridge this gap.

Mentoring standards-in-practice. As will be discussed in this chapter there was no formal list of mentoring standards. Indeed, it seemed that any type of role definition

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[10] See Chapter 2 for a description of these program standards types.

[11] Mentoring standards is a term coined by this author. It refers to what the mentor and mentee need to know and be able to do within the mentor-mentee relationship, including the tools used to enact these roles.

needed to come from either BTIM non-specific documents such as the mentor training materials including the common mentor resource book or BTIM-specific texts such as the mentor responsibility contract. Consequently, I needed to rely on the mentor and mentee interviews and focus groups to determine what they viewed as their roles and then I attempted to see if these roles were practiced during the observations of the mentee teaching and the subsequent post-conferences. Since from the mentors' and mentees' perspectives there were no mentoring standards, I called these role delineations "the lack of mentoring standards-in-practice" since they were based on what I heard during the interviews and witnessed in practice.

The purpose of this chapter is five-fold. First, I will examine Texas' Beginning Teacher and Induction Program (BTIM) using Cohen and Moffitt's (2009) policy framework, described in Chapter 3. Specifically, I will focus on how the interpretation and implementation of mentoring standards shape the mentor-mentee relationship for beginning mathematics and science teachers in seven high poverty middle school contexts in central Texas. After the analysis of BTIM vis-à-vis Cohen and Moffitt's (2009) policy framework, I will re-examine how the pieces of this framework fit together as a comprehensive unit (See Figure 1 in Chapter 3). In particular, I will draw attention to the different environments and different policy outcomes from what I interpreted from the mentoring literature to what I had seen emerged from this research. Third, using some of the ideas that emerged from my analysis of BTIM implementation, I will list some policy recommendations for those designating mentoring and induction programs. After

this discussion, I will look at the limitations of this study. Finally, I will make suggestions for possible research in regard to mentoring programs.

Cohen and Moffitt's Policy Framework

Using Cohen and Moffitt's (2009) policy implementation framework, I will discuss how the findings from this study fit into their four delineated elements: Policy aims, policy instruments, capacity and capability, and environment. However, as mentioned in Chapter 3, none of these elements works in isolation. But in order to better understand how the implementation and interpretation of mentoring standards influenced (or have not influenced) the mentor-mentee relationship, I will look at each one separately. At the end, I will give a comprehensive discussion of how these elements fit together as a fabric to describe the implementation of Texas' Beginning Teacher Induction and Mentoring (BTIM) program for nine mathematics and science mentor-mentee pairs in seven middle schools in three school districts.[12]

Woven within each of these policy elements are aspects which Cohen and Moffitt (2009) fail to address within their policy framework. Indeed, one of the weaknesses of this comprehensive policy model is that it tends to examine policy from 30,000 feet. In this analysis I will look at policy from the "bottom-up perspective" (See Spillane, 2004), primarily concentrating on mentoring policy at the mentor-mentee level. More

[12] It should be noted, however that the order that I address the elements is different from the order that Cohen and Moffitt (2009) use in their policy analysis. I purposively put the policy instruments as the end of the analysis in place of the environment since mentoring standards as a policy instruments are the policy focus of this study. On the other hand, I feel that the authors purposively put these components in this particular arrangement since there are important linkages between policy aims and instruments; instruments and capability …etc.

importantly, perhaps is that this study, unlike Cohen and Moffitt (20009) is not looking at mentoring policy through a historical prism, hence benefiting from time and space; rather this analysis is transpiring more or less in real time.

From my analysis, there appeared to be four emerging themes in regard to mentoring standards: (1) BTIM mentoring standards did not exist outside of mentor training; (2) mentor roles appeared to parallel the "research-based" mentor training materials sans training; (3) BTIM mentor roles were not consistent with all policy aims; and (4) BTIM mentoring standards were not formal and specific.

Policy Aims: Retention, Building the Mentor-Mentee Relationship and Getting Better

According to Cohen and Moffitt's (2009) framework policy aims are the goals of the policy. They are distinguished by two characteristics: Ambition and ambiguity which play a role into how policy is enacted by the implementers. In a nutshell, the more ambitious the aim (i.e., the further it is from the capacity of the implementers to implement), the more difficult it is for the implementers to reach this goal (Cohen & Moffitt, 2009; Spillane, 2004). Moreover, often to compensate for differing contexts in which policies are enacted, policymakers tend to make such aims ambiguous, giving the participants the leeway to adjust policy to obtain the desired goal to their specific context (Cohen & Moffitt, 2009).

From my document analysis and interviews of mentors, mentees, principals, and BTIM and TRC officials there were a plethora of BTIM policy aims with varying levels of ambition and ambiguity. These policy aims also came from multiple sources: BTIM

officials and project directors who trained the mentors; BTIM specific texts such as mentor responsibility contract, TRC's BTIM grant application, Texas Educational Code, BTIM non-specific texts such as the mentor training resources and from the mentors and mentees themselves (See Table 2). Consequently, there were aims coming from the "bottom up perspective" (i.e. those emanating from the policy implementers) and those from the "top down perspective" (i.e. those aims directed from the policymaker to the implementer, see Spillane, 2004) within the differing policy action levels (e.g., oversight level or implementation level).

From this study there seemed to be three principal and salient BTIM policy aims: Improve beginning teacher retention, build the mentor-mentee relationship and improve teacher capability (i.e. "get better"). Although one could argue that there was a fourth primary goal, improve student achievement, in practice this latter aim did not seem to be as powerful of a driver on mentoring roles as the other three policy aims. Indeed, I felt this goal was downplayed by the mentors although they seemed to be aware how the high stakes testing environment had on theirs and their mentees' professional lives and on their need, at least for one mentor to "stay on top" of the district curriculum and the statewide assessments to better serve their mentees. Moreover, there appeared to be another hidden policy aim: Build the mentor capability through the mentor training. Although not mentioned by the vast majority of mentors and mentees in their interviews, the Texas education code dictated that mentors receive mentor training from a "research-based" mentoring programs, approved by the Texas Education Agency Commissioner

(e.g., TxBESS or Mentoring Texas). This appeared to be an intermediary goal to reach the other policy aims.

The first goal—to improve teacher retention, according to one of the mentees in this study appeared to be "impossible" to reach within the mentoring relationship since there were other more powerful reasons for beginning teachers not to continue in the field of education. Hence, this should not be a policy goal since the mentor cannot influence this outcome. Indeed, from one of the mentee focus groups many of the mentees did not see teaching as a long-term occupation. The last two goals—to improve teacher capability and build the mentor-mentee relationship, however would seem to imply a different mentor and mentee role; these two policy aims have the potential to cause a mentor role conflict between being a helper and being an assessor (See Yusko & Feiman-Nemser, 2008). I will examine these last two aims, embraced by the mentors and mentees in this study. That being said, I will need to first frame the other two aims by examining the grand and ambitious goal of retention.

Retention: The unattainable policy aim. According to Cohen and Moffitt's (2009) policy framework retention in and of itself is a very ambitious goal since it assumes that mentors can through mentoring affect whether or not a teacher continues in the field. However, in terms of ambiguity it appears to have a dual nature; on the one hand, it is unambiguous since retention rates are easy to measure (and as such are often the desired outcome of many research studies examining mentoring and induction programs, see Glazerman et al., 2008; Isenberg et al., 2009; Kapadia et al., 2007) and ambiguous when the implementer questions whom are they trying to retain—any

mathematics and science teacher or an "effective" one. If it is the latter, what determines a quality teacher, and what mentoring roles would help to achieve this aim? Hence, the ambiguity sets in.

In my interviews many mentors and mentees mentioned retaining the beginning teacher as the goal of BTIM, but the mentees in particular stated other reasons for not staying in education that were outside of the confines of mentoring. From my focus group of mentees from Appleton in particular, they just could not picture themselves teaching for the long haul although they all expressed a deep respect and affection for their mentor, Angelica. Although they all felt fully supported both personally and professionally by their mentor, they still could not fathom teaching twenty or thirty years as their mentor had done. There appeared to be a multitude of reasons although many seemed to emanate from the high stakes testing environment Teaching was "not fun"; there was pressure on teachers to follow the district's scope and sequence, and having their students do well on high stakes assessments and humiliation of showing their low benchmarks on assessments in front of peers. One science mentee from Big Bear Collaborative put it succinctly: There simply was a mismatch (my words) between the policy aim and what the mentoring program could do: "I think that's an impossible task because the reasons for leaving have nothing to do with the mentor. I just think it's unrealistic to say a mentor can make that change…" (Justin, science mentee, Big Bear Collaborative)

Indeed, from this study it appears that the high stakes testing environment may play a future role in whether these beginning teachers continue to teach; it appears to give

tentative support to the premise that there is a relationship between retention and the enactment of these high stakes testing policies (Sass, 2012). In other words, there may be other environments created by other policies that may have a greater effect on teacher retention than being part of a mentoring program. Moreover, if retention is the primary policy goal then the professional culture of the school whether the environment is veteran-oriented or novice oriented professional culture (Kardos et al., 2001; Kardos and Johnson, 2007), for instance may play a role in how isolated and supported the beginning teachers feel which in turn may impact whether they continue to teach or feel a sense of job satisfaction. More importantly perhaps, is that it may be unrealistic to assume that one policy such as offering a mentoring program could "single-handedly" affect the beginning teacher rate; in other words, mentoring is "helpful" but not "sufficient" (Carver & Feiman-Nemser, 2009).

For the mentors in this study, they appeared to want to build the mentor-mentee relationship and stated that they tended to view their roles as advocates, emotional supporters and resource people. The mentees on the other hand, seemed to want to "get better" but did not seem to have a working platform in which they could improve; their improvement appeared to partially dependent on the mentor's judgment and experience.

Build the mentor-mentee relationship: Mentor's primary focus. On the surface, this policy aim seems to be very ambiguous and not too ambitious. However, in practice from my observations and interviews with the mentors it seemed that mentors put a lot of effort into building the mentor-mentee relationship. Although it may have looked slightly different from mentor to mentor (e.g., giving presents to the mentees;

asking about the mentee's well-being) mentors appeared to be very conscious of building the mentee's confidence, and gaining the mentee's trust.

Above all, mentors did not want to be seen as evaluators and shied away from using formal observational tools, in some cases not even bringing paper and pencil when working with the mentee. If a tool was used it, the mentors seemed to have believed would have changed the dynamics of the mentor-mentee relationship. Many mentors listed their roles as advocate, emotional supporter and resource person—whatever the mentee needed. Hence, from my observations it seemed that they downplayed observations; post conferences became times for mentors to share resources and give suggestions for improving classroom management skills. Indeed giving criticisms on the beginning teacher's pedagogical skills seemed not to be their primary role—building up the confidence of the beginning teacher was. That being said, some mentors did during their observations take on role of administrator-in-absentia, looking for items that administrators would look for in their "walk-throughs".

"To get better": The elusive (mentee) goal. The idea of "getting better" as a goal for the mentoring program appeared to be quite an ambitious goal for the mentees especially since there were no formal tools or instruments used to measure it. It also seemed to be an ambiguous one since it did not appear that the mentees had a clear idea about what "getting better" meant although some mentees appeared to know that having good classroom management skills was a must. To achieve this goal, it seemed that the mentees needed to rely on the mentor's experience and expertise to guide them.

From my observations, mentees appeared to have been detached from the observations in the sense they did not have their own goal for improving their instruction. Indeed, it seemed that mentees had no prescribed role so there did not seem to be any goal in their eyes directed at them that required action on their part, reinforcing the informal nature of the relationship and the program. Mentors came to observe but mentors were not always put into the "observer" role. One mentee would have the mentor distribute materials; another noticed that when the mentor came to the room, classroom behavior was better; others just wanted another set of eyes in the classroom, perhaps giving feedback on student engagement and student understanding of the lesson. Mentees seemed interested in what the mentor had to say during the post conferences but took the comments as advice, nothing they had to take to heart or actually do.

Mentees, in some cases perceived themselves as the "weak" link or as a student to a teacher. However, they seemed to assume that they needed to come forward in their relationship—bringing issues to the table, venting their frustrations with their mentor and be willing to try different things. In a few cases it seemed due to the lack of any formal mentee role, mentees perceived their relationship with their mentor as an informal one since no demands were placed on them. Mentees, in essence were "going with the flow".

Build the mentor capability: The intermediary policy aim. This last policy aim was usually not mentioned by the mentors and the mentees. However, in the Texas educational code, one of the mentor tasks was to be trained in the district mentoring program as well as according to a "research-based" mentoring program (e.g., TxBESS or Mentoring Texas). Indeed, this may have been the hidden policy aim since to achieve the

other policy goals the mentor would need to be trained in the appropriate roles. Moreover, BTIM funds essentially could only be used for mentor training and resources, mentor stipend and for substitutes for the mentors (so they could have the time to observe their mentees), reinforcing the importance of this goal. Interestingly, in practice no money could be allocated to the mentee. Hence, one could argue that BTIM, based on its funding and resources was a mentor-centric policy.

However, reaching the desired policy aims is often dependent on what the policy implementers in this case the mentors and mentee bring to the policy in terms of their knowledge of their roles, their dispositions and skill sets to the mentoring relationship (Cohen & Moffitt, 2009).

Capacity and Capability: The Policy Conceptual Fraternal Twins

Although Cohen and Moffitt (2009) used the term "capability" in place of "capacity" within their policy framework interchangeably, I made a distinction between these terms within this study. Capability is what the mentor and mentee bring to the mentoring policy: Their knowledge, disposition and skill set a priori to the implementation of the policy. Capacity is those elements missing from the mentor's and mentee's reservoir of knowledge and abilities, including their disposition. Consequently, these concepts are similar to fraternal twins in that they are identical in sharing the same core concepts (i.e., knowledge, skill sets and disposition) yet they have differing levels of these qualities which policymakers need to be aware in order to bring the policy to life.

From this study there appeared to be one fundamental theme: Mentors needed to compensate for the lack of mentoring program infrastructure. Although the mentors

appeared to know some of the aims and (some of) its instruments (e.g., mentor stipend) of this policy most mentors needed to bring a strong background in teaching and other (i.e., not BTIM) formal mentoring experiences, filling in the missing elements of the BTIM mentoring policy infrastructure. Mentees seemed to be "in the cold" since they did not receive in most cases a formal introduction to BTIM; hence, they needed to depend on themselves and their mentors to carve out their undesignated roles.

Lack of mentoring policy infrastructure. There did not appear to be any real infrastructure for BTIM: No common language and vocabulary and no common framework since there was not a common professional mentor (and mentee) knowledge and skill base. Indeed, there did not appear to be a common thread that linked the policy aims, policy instruments, and resources in the environment in a coherent and consistent fashion. Mentors needed to be trained according to a "research-based" training program but from the document analysis these materials had differing levels of specificity (and congruence). There was one common mentoring tool, the mentoring log, but this tool seemed to be more of a compliance and accountability activity (to ensure that mentors had weekly face to face interactions with their mentees), and not an instrument designed to improve instructional practice. Moreover, if observations were conducted, most mentors had the discretion in the choice of tools. As a consequence, there did not seem to be a common knowledge or skill base, driven by common (observational) tools that the mentors were working on with their mentees.

Mentors-in-the-know and mentees-in-the-cold. Despite the differences in mentoring training among the three collaboratives, the mentors brought a lot of

capability; many had been teachers for several years within their school districts and have had other formal (usually) district mentor training. In other words, even if there were no mentoring standards to guide them, they could rely on their teaching and mentoring experiences, their own learning (through the reading of mentoring textbooks) and in some cases their monthly mentor meetings to help carve out their mentoring roles. Mentees, on the other hand did not seem to be so fortunate. Most did not have a formal introduction to the mentoring program; what they learned about the program they needed to learn from their mentor and in the enactment of the mentoring policy.

Successful mentoring relationship: dispositions and capability. In most cases, it seemed the success of the mentor-mentee relationship depended on the mentor's and mentee's disposition and capabilities. Since most of the mentors did not receive formal BTIM mentor initial and/or continual training, focused on their learning, they had to seek out on their own mentor training through self-study of BTIM mentoring book(s), participation in the project director's training of BTIM, and other teaching conferences. In other words, similar to Cohen and Moffitt's (2009) policy framework, the mentors needed to make up for the lack of infrastructure that BTIM did not provide. In this case, the lack of accountability on the part of the project directors to provide and reinforce initial and continual mentor training needed to be compensated by the mentor's desire to learn and be a "good" mentor. That being said, mentors seemed to have a real concern both personally and professionally for their mentees.

Mentees also appeared to understand that the success of the mentoring was dependent on them bringing their issues to their mentors and being open to trying what

their mentors had suggested to improve instruction. But lacking any role definitions it appeared that the mentees did not know what was expected of them. Although one could argue that BTIM was designed to be an added-on program with little commitment from the districts and schools in regard to support for the program, the success still rested heavily upon the mentors' knowing shoulders.

The environment in which policy is enacted constitutes all of the policy elements: aims, instruments and the capabilities and capacities (Cohen & Moffitt, 2009). Within BTIM I had found three policy contexts: TRC policy environment, collaborative implementation context, and the NCLB and Texas' high stakes policy environment which appeared to affect the roles of the mentor and mentee and the nature of the mentor-mentee relationship. However, unlike Cohen and Moffitt (2009) I will look at these policy environments from the macro-level or 30,000 feet level in terms of how the other policy elements interact with each other and at the micro-level in terms of how these elements affect the mentoring roles, via the mentor's and mentee's perspectives.

Environment: Russian-Doll Configuration

Under their policy implementation framework Cohen and Moffitt (2009) discuss the "tension" between policy and practice since the four elements act on each other in ways that a policy maker cannot anticipate; the resources within the environment, and the capabilities of the policy implementers are all variable; the policy instruments vary in their strength and saliency; the policy aims due to its levels of ambiguity, and ambiguous—all affect implementer's capability to bring policy to practice. But it is the environment that plays on "… all the other resources—the instruments, aim and

capability—that shape management of the dilemma in the relation between policy and practice" (Cohen & Moffitt, 2009, p. 39).

The environment in which the policy is enacted is affected by the policy aims, instruments and capability of the implementers (See Table 2). Cohen and Moffitt (2009) looked at the environment at the macro and micro-levels since both have an effect on policy implementation. At the macro-level policy are the organizational structures –"… the governance structures, political organizations, and the social-economic context in which policies emerge and subsist" (p.25). At the micro-level, the environment is the "circumstances" in which the policy is enacted; this will include the "fiscal practices" and the "culture" in which the implementers must bring policy alive. Although the macro-level is an important component of understanding the environment especially in the manner in which it interacts with the aims, capability and instruments, the focus of this study was at the micro-level—how mentoring standards affected the mentor-mentee relationship. That being said, I will discuss mentoring policy at the macro-level, briefly touching upon TRC's governance of BTIM: the policy aim and its implications on the mentoring activities. I will go into greater depth of the macro-level—how the mentors and mentees made sense of the environment—since the intent was to see the effects of a mentoring policy at this lowest level.

Although the mentor-mentee relationship essentially only functioned in the school and district in which the mentor and mentee taught, there were several different contexts in which BTIM operated that had ramifications for the mentor-mentee relationship. These contexts were much like a Russian-doll in which each smaller doll was encased by an

even larger one. These layers had not only an effect on the roles taken on by the mentor and mentee, but the manner in which they were conducted. Carving out time to mentor, for instance became issues for the mentors who were practicing teachers as time grew near to the high stakes testing window. One mentor aware of the new assessment drew upon her knowledge to look for items that she believed would be covered within these assessments (e.g., greater demand on vocabulary; and the novel ways of covering similar topics—perimeter/ asking about the fringe around a blanket). I identified four environments: TRC policy environment, collaborative implementation context, NCLB and State high stakes testing environment and the school/district in which the mentoring took placed.

TRC policy environment. The Texas Regional Collaboratives (TRC) administered the BTIM through its collaborative network. Mathematics and science directors in the collaboratives would apply for BTIM grant funds; TRC officials would evaluate them and determine which collaboratives would be part of BTIM. At the end of the grant cycle, BTIM project directors would write a report, including the number of mentors and mentees who started and completed the program as well as the number of beginning teachers rehired for the next academic year. Hence, TRC had a laissez-faire relationship with the quality of the mentoring; by necessity it needed to depend on the project directors to complete the tasks outlined in the collaborative's grant proposal including the mentor training. But there was no real accountability for the mentor, outside of maintenance of the mentor log and the BTIM project director in regard to mentor training and support. TRC officials could not mandate observations. Consequently, there

seemed to be a lack of fidelity to some of the intentions of the educational code; specifically, ensuring that the needs of the mentor and mentee were met. That being said, it appeared that TRC's hands may have be hemmed in by Texas Education Association, the state's department of education: BTIM funds were only for mentor stipend and materials, mentor training, substitutes and the lack; mentees did not have access to this funding. This was the pragmatic side of implementing the BTIM policy.

Collaborative implementation context. Each collaborative project director held the mentors accountable for completion of grant requirements including the completion of the mentor log. As a researcher, I was not privy to each collaborative's grant application which would have indicated for instance, the type and frequency of mentor training. Although I attended a few trainings (two at Big Bear and one at Clementine Collaboratives) the fidelity of the training to the "research-based" mentoring resources and its effect on the mentor-mentee relationship was not the focus of this study.

From the mentor focus groups, I learned that mentor training was spotty at best. Appleton Collaborative's project director gave no initial or continual mentor training. Clementine Collaborative's project directors gave no continual mentor training specifically designed for mentor development. Although TxBESS was the mentor training program used in this collaborative, according to one of the mentors in this study, the training was so long ago (years before the implementation of BTIM) that she did not remember much. Only Big Bear Collaborative offered monthly mentor training which mentors viewed as being influential in their role definition. Since it was through the "research-based" mentor training and resources that specified in greater detail the

mentoring standards (than the BTIM-specific documents receiving the training) it appeared at least on the surface that the mentor training would be imperative to flesh out the mentoring roles. Ironically, despite the evenness in training mentor roles seemed to more or less parallel those described in the research-based training manuals and in the common mentoring book; specifically the mentor's role in building the mentor-mentee relationship. That being said, some of the mentor roles, under ESC-adapted TxBESS mentor training materials, such as being a facilitator of reflection skills, and under MT train-the-trainer mentor materials, such as being a "coach" (Day #2: #10) appeared to be roles downplayed by the mentor.

NCLB and state's high stakes environment. Interestingly, according to mentor and mentee interviews the high stakes testing environment did not have an effect on the personal mentor-mentee relationship. However, it did have an effect on the manner in which the mentor conducted her duties. For instance, mentors who were practicing teachers had to plan when they could observe their mentees so that their students did not miss out on instruction. Consequently, the timing and the length of observations needed to be carefully choreographed by the mentor. One mentee commented that she noticed that the closer she got to the testing window, the more mentoring became one more thing to do—it became more of a compliance activity than one focused on her development.

Environment: The view from 30,000 feet. From Table 2 one can see that the policy aims, instruments used and the capabilities appeared to have fluctuated depending on the environment. The policy aims, in particular seemed to vary markedly from the educational code to the mentor and mentee. In other words, the emphasis at the mentor-

mentee level appeared to have a greater focus on the interpersonal level—building the mentor-mentee relationship than on building the mentee teaching capability. This however, does not mean that mentors were not cognizant of helping their mentees with developing content pedagogy but tended to favor building the mentee's confidence than offering critical suggestions, based on an agreed-upon observational tool. Indeed, the overall policy aim in practice seemed to be to retain the beginning teacher not on building the capability of either the mentor or mentee.

Although the environment is the context in which all the other variables in Cohen and Moffitt's (2009) policy framework operate, it is the policy instruments that support (or do not support) the implementer's capability (Cohen & Hill, 2001; Cohen & Moffitt, 2009; Spillane, 2004), which motivate the implementer to enact the policy (Ingram & Schneider, 1990; Cohen & Moffitt, 2009) and allow the policymaker to inject some accountability measures (e.g., performance standards). In other words, they are the building blocks to a policy implementation infrastructure.

Policy Instruments: Saliency and Strength

According to Cohen and Moffitt (2009) policy instruments are those tools used to bridge the gap between policy and practice. Often these tools are utilized to build the implementer's capabilities; this assumes that policymakers understand their capacities—what the implementers are missing but are needed to achieve the policy aim: Their knowledge, dispositions, and skill sets. In the education field, policy instruments include professional development and training, curriculum, training materials and standards (Cohen & Hill, 2001; Cohen & Moffitt, 2009; Spillane, 2004). However, policy

instruments also incentivize the implementers to enact the policy. Money in the form of bonuses or stipends, for example tend to be the chief reward for policy enactment (Schneider & Ingram, 1990). In the mentoring policy world often these incentivizing elements are mentor stipends. Mentor training and mentee professional development also spur policy compliance although the benefits may not materialized in the short-term; in addition, they are usually the invisible policy tool partners since they are not easily measured or even seen by policy makers (Schneider & Ingram, 1990; Spillane, 2004).

Policy instruments have varying strength and saliency (Cohen & Moffitt, 2009). Strength refers to the power of the instrument to influence practice; whereas saliency is "…how closely they (policy instruments) connect with what must happen in practice to achieve policy aims" (Cohen & Moffitt, 2009, p. 31). The more salient and strong the policy instrument the greater the possibility of reaching the policy aims. But there is one important caveat: The probability of achieving the policy goal is increased if the change in practice "departs" only a little from the present ways of doing things. In other words, if there is an enormous departure from current practice (i.e. need for greater capability on the part of the implementers), the probability is less likely even if the instruments are strong and salient (Cohen & Moffitt, 2009). Moreover, as noted by these authors if the policy is ambitious and ambiguous to get instruments that are strong and salient is a difficult task.

Although the focus of this study was on mentoring standards, the other policy instruments will be briefly discussed since they had the potential to influence (mentoring) practice. I identified four other mentor policy instruments: Mentor stipend, mentor

responsibility contract, mentor training/support and resources and BTIM accountability system. I will briefly touch on all four of these other BTIM instruments. However, it must be noted that the discussion of most of these other policy instruments will be rather tangential and not comprehensive. Indeed, some of the policy instruments such as the mentor responsibility contract, the mentor stipend and BTIM accountability came up quite naturally within the mentor interviews (e.g., I did not ask the mentors for instance how the mentor stipend affected their mentoring behavior). More importantly perhaps is that levels of saliency and strength of policy instruments as noted by Cohen and Moffitt (2009) appear to vary not only due to the different environments in which these policies are enacted but also due to the differing capabilities of its implementers: What is a strong policy instrument (i.e., conduce the individual to change her practice) for one mentor may not be for another.

The other BTIM policy instruments. Policy instruments usually work in tandem (Cohen & Moffitt, 2009; Schneider & Ingram, 1990). To isolate one without mentioning the other policy tools may give a biased understanding of the strength and saliency of one instrument over another. I identified four other BTIM policy instruments: Mentor stipend; the mentor responsibility contract; mentor training and accountability system; each appeared to help to bridge the gap between policy and practice. I will examine briefly these other BTIM policy instruments.

Mentor stipend. First, the BTIM mentor stipend was quite large, $2500 per mentee especially in comparison to the participants' district's mentor stipend. Hence, as a policy instrument it was strong but not salient (i.e., it did not have the means to meet the

policy aims as the sole policy tool). In my interviews with the mentors the influence of the stipend came up rather informally. When I asked Mike what he received from the mentoring experience, he responded:

> Getting to build a relationship with these guys - I'll be honest with you …That is the big thing - the pay is important but getting a chance to help somebody to hopefully be good and to stay doing this. (Mike, mathematics mentor, Big Bear Collaborative)

Knowing for instance, that the mentors were receiving quite a bit of money made at least one of the mentors motivated to help her mentees and/or share what she was receiving with her beginning teachers. Moreover, she seemed to have believed that the difference in pay between district mentoring and BTIM had something to do with the "success" of the program.

> I don't think that program (the district's program) is quite as successful as this one and I'm sure that the pay has something to do with it because Xerxes School District pays either four or five hundred dollars a year for a mentor to mentor one of the beginning teachers. (Joan, mathematics mentor, Clementine Collaborative)

The stipend though a potential motivator for the mentor does not directly benefit the mentees. Consequently, Joan would treat her mentees to dinner and periodic gifts. For instance, during the lunch break during a mandatory mentor training on behavioral management that her mentees came but were not required to attend she took her charges to lunch. Although this mentor felt it was a "nice thing to do", she also realized that her mentees were not receiving any (monetary) rewards to participate: "I did because I felt like if I'm being compensated this well for it, I need to put in the time." (Joan, mathematics mentor, Clementine Collaborative)

Hence, in practice the mentor stipend had a rather moderate strength as noted by some of the mentors from this study. However, it does not seem on its own to change practice of the mentors; it appeared as a motivator to do a "good job" mentoring.

Mentor responsibility/commitment contract. The mentor responsibility contract spelled out in very modest terms what the mentor needed to do: Meet weekly with the mentor and in some cases conduct observations. It also listed other responsibilities such as the completion of mileage forms and the dates when specific documentation such as the mentoring logs needed to be completed and turned in as well as attendance at mentor meetings. These contracts in no way stipulated in what manner or designated the mentor tools needed to complete their mentoring duties. Only the Appleton Collaborative's mentors were required to complete a specific observation tool; however, this appeared only to be seen by mentors as an act of compliance. Interestingly, mentors appeared to be aware of the contract. When I asked one mentor about the frequency of the observations, the mentor responded that she needed to re-read the contract: "I don't think they were specific about that - I mean, I think it is implied that part of your contacts will be classroom observations - I have to look more specifically at the contract…" (Susan, science mentor, Big Bear Collaborative).

The contract's strength to change practice seemed to depend on the initial and continual mentor training, which as was stated earlier uneven across the collaboratives. Mentees, on the other hand received no such document that delineated their role(s). Consequently, the mentor responsibility contract could not affect mentoring practice;

these contracts, according to Cohen and Moffitt's (2009) policy framework a weak and not salient policy instrument.

Mentor training, support and resources. Mentor training appeared to be the cornerstone of building the mentor's capability to mentor under Texas educational code. Indeed, from the document analysis of the "research-based" mentor training guides, this is where the mentor roles were delineated. However, in practice, from the mentor interviews and focus groups, it seemed that only the mentors in Big Bear Collaborative received continual mentor training which fleshed out their roles through interactions with other mentors and their BTIM official, a former area district administrator who ran the monthly mentor meetings. Although it appeared that mentors in this collaborative believed that this mentor training and support was a salient and quite strong vehicle for learning their mentor roles, this did not appear to be the case with the other two collaboratives where the mentor training and support was either non-existent or spotty at best.

The other common mentor resource was Paula Rutherford's (2005) *Mentoring in the 21st Century: Creating a Culture of Learning.* Although this book was mentioned by some of the mentors as a guide, it appeared to be an essential resource for only one mentor, a first-year (formal) mentor in Big Bear Collaborative. The other mentors appeared to have relied on their teaching and other formal mentor training and experience and their own self-study of mentor texts to help build their mentor capability to mentor. Hence, it appeared in the eyes of the mentors that this common mentor resource may have been salient but not a strong policy instrument. In other words, this common mentor

resource had the potential to direct the mentor's activities, but it did not seem on its own to generate much power.

Accountability system. The BTIM accountability system seemed to be a patchwork of compliance activities. But there was one activity that all the mentors in all the collaboratives needed to do: Complete a mentoring log, get it initialed by the mentee and turned it in to their collaborative's project director. That being said, the initialing of the mentoring logs appeared at least in one mentor's mind to be an important accountability piece.

> And then this year, it went to not only do we meet with them but now they have to initial that you met with them. Because they are getting this money and apparently some people probably just made up, maybe, I don't know. Maybe some people just said they met with the teachers when maybe they didn't. I know Sally had a mentor last year that was supposed to meet with her once a week, face-to-face. I think maybe met with her twice all year. (Joan, mathematics mentor, Clementine Collaborative)

In only one collaborative (Appleton), the mentors were required to complete and turn in a pre-determined observational tool. Another collaborative (Big Bear) had the mentors and mentees complete surveys; the mentors could use the surveys as sort of a needs analysis of their mentees.

For at least one mentor all the accountability paperwork was overkill and impinged too much on the mentee's time. As the mentor explained all the paperwork that she and her mentee needed to complete in order to participate in BTIM.

> The first time we had to do is fill out all this paperwork. "I need your signature." It was after we met their principal. Then they had to fill out paperwork kind of what you gave us today. (Mentors need to sign an IRB document to participate in the study.)Then there was another survey, a mentor survey, mentee survey. And then there was a science survey. It seemed like there were three different forms for math or science. And that was "just sit down, I have to have you fill it out

> right now… They have to be done." It just seems like we could do a better job, introduce it to them. Even having them initial every visit I feel. "I just hate to have to ask you but would you mind?" It's hard. (mentor, mentor focus group, Big Bear Collaborative)

The BTIM accountability system appeared to be a weak policy mechanism since it had no real teeth. Mentors essentially had to turn in mentoring logs and/or a few observational tools to receive their mentoring stipend. There were no requirements for mentees. Moreover, it did not seem that the accountability system was meant to change the mentor's or mentee's practice; rather it appeared to be a means to get the mentors to meet weekly with their mentees and if needed, to conduct observations. In other words, it seemed to be a compliance measure—not designed to affect either the mentor's or mentee's roles.

I will now turn to examining how mentoring standards played (or did not play) out in practice at the micro-level, stepping away from macro-level analysis. I will examine four themes that appeared to emerge in regard to BTIM mentoring standards.

Mentoring standards at the micro level. Within their policy framework Cohen and Moffitt (2009) examined policy implementation from 30,000 feet or from a "top down perspective". However, I will look at mentoring standards from a more micro-view, examining four premises that emerged from this study. There is however one important caveat to this analysis: Since in the eyes of the mentors and mentees there were no mentoring standards, as a researcher I could not point to a particular mentoring standard and discuss it with the mentor and mentee. To compensate for this, I needed to look for what I called "lack of mentoring-standards-in-practice"—what roles did the mentor and mentee see themselves playing and what roles did I see the mentors and mentees playing

during their interactions in a standards-less context. Consequently, instead of referring to mentoring standards, I needed to examine the mentor roles to see if they were consistent, for instance, with the mentor training materials.

From this study there appeared to be four premises, surrounding BTIM mentoring standards and the mentoring roles, seen in practice: (1) BTIM mentoring standards do not exist outside of mentor training; (2) mentor roles appeared to parallel the "research-based" mentor training materials sans training; (3) BTIM mentor roles were not consistent with all policy aims; and (4) BTIM mentor standards were not formal and specific. At the end of this description, I will give the "grand" picture of BTIM mentoring standards.

BTIM mentoring standards do not seem to exist outside of mentor training. In Cohen and Moffitt's (2009) policy framework, the authors put much emphasis on the saliency and strength of the policy instruments in relation to the implementer's capability and the policy aims and the environment. However, the policy tools must also reinforce each other. In other words, there must be consistency among all the policy instruments (Cohen & Hill, 2001). In regard to mentoring standards they must be consistent with the mentor training, especially if this is the mechanism in which the mentors learn their mentoring roles. However, based on my document analysis, here is the conundrum: the mentoring standards did not seem to exist unless there was "research-based" mentor training. Without the training, the mentors must depend on the BTIM-specific documents such as the mentor commitment contract. However, the mentor roles were in essence an outline of tasks; they do not describe how the mentor will perform these duties.

Consequently, from the interviews with mentors and mentor focus groups, the mentors in most cases needed to depend on their capability—what they brought to the policy a priori to BTIM to define their roles.

In practice, however the mentor training was spotty across the collaboratives; only one collaborative had initial and continual mentor training, centered on mentor learning and support. Consequently, one could argue that the mentoring standards cannot be strong or salient unless there is some sort of mentor training. As predicted by Cohen and Moffitt's (2009) policy framework the mentor training (or lack of mentor training) impacted not only the mentoring roles but the mentor-mentee relationship.

The mentor training was very spotty for two of the collaboratives; one project director gave no mentor training; the second did not give training, centered on mentor development (i.e. developing the mentoring skills); the third collaborative used a Professional Learning Community model for its monthly mentor meetings which mentors acknowledged helped to flush out their mentoring roles. Although "research-based" mentor training contained the mentoring standards with varying levels of specificity, if the mentors did not receive this training and support they appeared to be on their own to learn how to mentor.[13] To compensate for the lack of mentoring standards, the mentors seemed to rely on their own teaching and formal mentoring training (outside of BTIM) and experiences and self-study of mentoring materials; and their own disposition (i.e.

[13] I had attended a few of the mentor trainings in two of the collaboratives, however my focus was not on how well the mentoring roles matched across all the different mentor learning formats (e.g. between the monthly mentor training and the common mentor book.)

wanting to learn more about mentoring) to learn about their roles. Interestingly, even without the formal mentor training the mentees, similar to the BTIM non-specific documents mentors across the collaborative tended to be in agreement: their role was supportive not an evaluative one.

Mentor roles appeared to parallel the mentor training materials sans training. According to Cohen and Moffitt (2009) if there is a lack in the infrastructure which supports the policy, implementers would need to compensate for these missing elements by relying on their own capability. Interestingly, even without formal mentor training the roles played by the mentors without training more or less seemed to parallel those roles described in the mentor training materials. For example, the mentors tended to focus on being an emotional supporter, advocate and content resource person. Indeed, these were the roles that both mentors and mentees identified in their interviews. I do not know if the other formal mentor training and experiences which many of the mentors brought to BTIM contained these roles. Indeed, looking at the influence of other formal mentoring training programs on the mentor's roles was not part of this study.

This finding appeared to agree with the a literature review of mentoring studies done by Wang and Odell (2002) in which they identified three "perspectives" that mentors tended to ascribe to in enacting their roles: humanistic, situated apprentice and critical constructivist. In these nine mentor-mentee pairs it seems that the mentors perceived themselves to fall in the first two categories in which the mentor tends to favor being emotional and psychological support for their mentees. That being said, this research appears to lend at least some preliminary support that understanding what the

mentor's and mentee's expectations for the mentor-mentee relationship bring to the mentoring relationship (what Spillane, 2004 calls the "bottom-up perspective") is important to help policy makers to create "external representations" to change prevailing attitudes about their roles (Spillane, 2004). In other words, if policy makers have differing mentor policy outcomes they will need to understand what perceptions the mentors and mentees carry with them in regard to their roles to the policy: If mentors are hesitant to help the beginning teacher to learn to teach, preferring instead to take a more emotional supportive mentoring role (as noted by Wang & Odell, 2002) and the goal is to improve instructional capability, policy makers will need to change the mentor's and mentee's external scripts (Spillane, 2004).

This leads to one of the roles specified in "research-based" mentoring guide that did not seem to have happened with much fidelity within the mentor-mentee relationship.

Coaching: the undefined and (mostly) un-enacted mentor role. That being said, there did appear to be one role, mentioned in both of the "research-based" mentor training programs that did not appear to be fleshed out in these resources: Being a coach. Although Mentoring Texas resource materials contained information on having a "coaching conversation"–how to go from being "directive" to "non-directive" and TxBESS seemed to have some professional days for mentors set aside for learning how to be a "cognitive coach" this role in the interviews with the mentor was not mentioned. Indeed, "cognitive coaching" has a specific definition according to Costa and Garmston (1994); it is a three phase process for conducting the observation cycle designed to get the teacher to be more reflective over her practice. Moreover, although one could argue

that the three delineated roles mentioned above are all elements of being a "coach" in most of the observations of the mentors interacting with the mentees during the post-conferences they did not have a "coachable" feel in which the mentor was trying to get the mentee to be reflective over her lesson. In other words, the observations did not seem to be explicitly directed to improving the instructional competence of the beginning teacher primarily since there was no agreed upon BTIM observational tool or even an agreed-upon common teaching goal between the mentor and mentee.

That being said, some of the mentors in their roles as experienced teachers and/or department chairs may have taken on this role, outside of the observational cycle. For instance, Joan, mathematics mentor from Clementine Collaborative remarked how tired she was at the beginning of the year since she needed to spend so much time with her mentees. She discussed how if one of the beginning teachers did not know how to conduct a mathematics game, she would play the game with the mentee. Another mentor from a focus group from the same collaborative stated that he would do the science experiments with his beginning teacher until they felt comfortable. I did not observe such activities.

That being said, there appeared to be one mentor role that seemed to double as a policy aim within the mentor-mentee relationship. Indeed, the mentors in this study seemed to have placed a strong emphasis on the psycho-social function of mentoring (Ragins & Kram, 2007; Wang & Odell, 2002)

Predominant mentor role and policy aim: building the mentor-mentee relationship. From the document analysis, both the common mentoring book and the

mentor training resources appeared to put a high value on building the mentor-mentee relationship and having mentors taking on supportive roles such as emotional supporter, content resource person and advocate. Themes of creating a confidential and trusting relationship between the mentor and mentor appeared to be of paramount importance to many mentors (so much so that the project director of one of the collaboratives informed one of the mentors that she should not participate in my study since the conversations between the mentor and mentee were to be kept confidential). By no means could the mentor be put in an evaluative role. Consequently, mentors appeared to shy away from using any formal observational and conversational tools with their mentees. If a tool was used, it was usually at the discretion of the mentor.

Interestingly, this finding seems to cast a light on the assumption that a mentor cannot be both an evaluator and a helper (See Carver & Feiman-Nemser, 2009; Yusko & Feiman-Nemser, 2008) without changing the nature of the mentor-mentee relationship. However, some researchers have found that putting the mentor in the position of evaluator, using tools such as summative assessments appeared to give accountability teeth to the mentoring policy but also gave "courage" to the mentors to give "honest" appraisals of their mentee's strengths and weaknesses (Yusko & Feiman-Nemser, 2008).

Mentor roles were not always consistent with all policy aims. Part of the consistency of policy instruments is the congruency of the policy aims within these instruments (Cohen & Hill, 2001). Policy instruments must be aligned, in other words to a common purpose or aim (Cohen & Moffitt, 2009). As mentioned under policy aims, I identified three principal goals: improve the mentee retention rate, build the mentor-

mentee relationship and build the mentee's capability (e.g., "get better") and one hidden goal: build the mentor capability through mentor training and support. These policy goals came from a multitude of sources (See Table 2) with varying levels of ambitiousness and ambiguity (as discussed under policy aims in this chapter). I will discuss each policy aim-in-practice briefly and how they appeared to influence the mentor's roles and how they aligned to the various policy aims.

Close goal alignment: retention & build the mentor-mentee relationship. The first and second goals—to improve the retention rate of beginning teacher and build the mentor-mentee relationship seemed to be consistent with the mentor roles adopted by the mentors in this study. Mentors, not wanting to be seen as evaluators, downplayed their observations often not using a formal observational or conversational tool with their mentees. From my observations and interviews, most mentors seemed to take on the roles of emotional supporter, advocate and resource person. Moreover, these roles appeared to be reinforced within the "research-based" mentor training materials whether or not the mentor received initial and/or continual mentor training and support as discussed above.

The tool-less policy goal: Build the mentee capability. For the third goal—build the mentee teaching capability did not seem in practice to be in line with the mentor roles. Indeed, as mentioned above mentors shied away from using any type of formal physical tool with their mentees for fear of jeopardizing the mentor-mentee relationship. Consequently, it seemed that post-conference conversations were not only usually dominated by the mentor but based on items that the mentors knew that their administrators would look for during their observations (e.g., classroom management).

That being said, one of the mentors trained in the Milken Foundation's Teacher Advancement Program (TAP) appeared to use his (coaching) skills (e.g., the manner in which he asked and directed his questions to the mentee). The mentor himself acknowledged how he relied on this previous experience observing and talking to teachers in his capacity as mentor teacher under TAP. That being said, mentors did discuss such issues as classroom management

Some mentors stipulated that they wanted their mentees to gain confidence in their teaching, did not seem themselves to have specific teaching goals for the mentee, driven by any professional teaching standards. In addition, mentees although viewing their mentors as teaching experts (i.e., having a high regard for the mentor's experience) and seeing the mentoring program as an avenue to "get better", did not seem to have any objectives or goals for themselves during the observations. They listened to their mentors comments and decided what the take-away would be for them. Consequently, there appeared to be no congruence between the policy aim of increasing mentee capability and the mentor role as observer. At issue it seemed that without tools the observations appeared directionless for both the mentor and mentee.

Interestingly the lack of conversations between the mentor and mentee on how to improve instruction may be due to teacher socialization. As Lortie (1975) discovered in his study that teachers, like other professionals, are socialized into their positions. For instance, teachers learn that they are autonomous and equalitarian. To tell a colleague that he or she needs to improve in a certain area may run counter to these strong professional premises especially since many of the mentors worked side by side with their mentees in

the same school, usually in the same department. Hence, the mentor suggests but does not dictate.

Mentor-centric policy goal: Build the mentor capability. The last goal—build the mentor capability appeared in theory to be consistent with mentor's role as a learner. This goal was consistent with the BTIM funding since monies could only be directed towards mentor training and support, including materials, mentor stipends and substitutes for the mentors. However, in interviews with the mentors they did not list as one of their roles as learner. That being said, mentors seemed to be aware that they were learning their craft either through self-study of mentoring books, and/or mentor training sessions. Indeed, a few noted that they read mentoring resources on their own. However, how BTIM was structured especially how monies were used appeared to lend credence to the idea that the focus appeared, at least in practice more focused on the mentor than the mentee.

Mentoring standards were not formal and specific. The specificity (Bartlett & Johnson, 2009; Cohen & Hill, 2001) and formality or "external representations" of policy, coupled with "internal" understanding of what the policy means (Spillane, 2004) are important components of the sense-making that occurs during the implementation of policy (Spillane, 2004; Yanow, 1996). The amount of policy specificity appears to work hand in hand with implementer's capability: Less capable implementers may need greater specificity in what the policy demands than those with greater capability especially if the policy aims are ambiguous (Cohen & Moffitt, 2009). In the standards world, standards must be "familiar" to the policy implementers but these "external representations exist fully only when individuals use them…" (Spillane, 2004, p.181) But this means that the

standards, as policy instruments must be detailed or specific enough "… to build a basis for implementer's learning…" (Cohen & Hill, 2001, p.6)

Mentoring policy is no different. The formality and specificity of the mentoring standards-what the mentor and mentee need to know and be able to do play a role in the mentor-mentee relationship shape the mentoring roles. Moreover, the amount of specificity will depend not only on the ambitiousness of the policy aim but also the capability of the mentor and mentee to play these delineated roles. If mentor has had for instance, a lot of training, support and experience in mentoring they might not need formal and/or specific standards. But if the mentor is being asked to do something that he or she is unfamiliar or radically different from present practice, she may need more specific standards, paired with training aligned to these standards. From my interviews with some of the mentors and mentees, the lack of a formal list of mentoring standards and specificity of role definitions appeared to mean that they were on their own to determine the nature of the mentor-mentee relationship.

No formal "list". First and foremost, there was no formal stand-alone list of BTIM mentoring standards which described the mentor and mentee roles and no common instruments, save for a mentoring log to use within the enactment of these roles across the three collaboratives. There was also no official BTIM mentor guidebook, only a common mentor resource book. Consequently, in the eyes of the mentor and mentee the mentoring standards had no saliency which in turn meant that the mentoring standards had no strength.

Varying levels of role specificity. From my document analysis I found mentor roles, duties and/or responsibilities cited in several written sources: Texas BTIM educational code, collaborative responsibility contract and the common mentoring book, Rutherford's (2005) *The 21st Century Mentor's Handbook: Creating a Culture for Learning*, and the mentor training resources with varying levels of specificity. Only the non-specific BTIM documents, in particular the "research-based" mentor training seemed to breakdown these roles in any depth. Mentor training materials in essence were the mentoring standards since there was no stand-alone formal document which contained them.

No formal mentee role. While there seemed to be a high focus on the mentor's roles in regard to their tasks and responsibilities, mentees appeared to be left out of the equation in BTIM policy. Mentee role definition seemed to be either non-existent or very limited. Based on my interview with the TRC official the expectations for the roles of the mentor and mentee should have come from the BTIM project director in the form of the initial and continual mentor training; the mentor, in turn would inform the mentees about their roles within the program. However, some mentors did not receive any initial and/or continual training and many mentees did not receive this information from their mentors.

Some mentees seemed to have felt that they were thrown into the mentoring relationship since they were not given a formal orientation to the program. Consequently, some mentees seemed to feel that their relationship had a more "go-with the flow" or informal relationship since there were no demands placed on them; they would come with their issues to the mentor who would attempt to address them. More importantly

perhaps, it seemed that mentees needed to rely on their own perceptions of their and their mentor's role. For instance, mentees seemed to assume that during observations the mentor would come to the classroom and using their teaching expertise would help them to become better teachers. From my observations, it seemed that the mentees had a passive role within the mentor-mentee relationship. In most cases, the mentees listened to the mentor, nodding their heads. But it did not seem that they were leading the way in their own professional development.

Interestingly the lack of mentee role also appears in the literature of mentoring as well. For instance, Wang and Odell (2002) discuss mentor roles but not mentee roles within the mentor-mentee: what was discussed was what the mentee is expected to learn (e.g., teaching technique or disposition) or receive from the mentee-mentor relationship. In most cases it assumes that the learning is a one-way avenue between the mentor and mentee with the mentor giving and the mentee receiving. Although in some state mandated induction and mentor programs such as Connecticut and California (See Carver & Feiman-Nemser, 2009) mentees need to be actively involved in their own professional learning, mentee's professional growth seemed to be based on the mentee's disposition.

The (grand) effect(s) of lack of mentoring standards in practice. The effects of lack of BTIM mentoring standards appeared to have affected the roles assumed by the mentor and mentee. However, from this study I could not identify if they as practitioners did not know what was actually guiding them or that there were actually no mentoring standards (See Schon, 1983; Shulman, 1987). Consequently, I needed to look at the "research-based" mentor training materials and resources, mentor responsibility contract

and the common mentoring book to see what mentor and mentee roles were highlighted and what mentoring tools, if any were being used within the mentor-mentee context.

From my document analysis there appeared to be mentoring standards—albeit at differing levels of specificity but they were not labeled as "standards" nor were they formally aligned to the mentor training and/or mentoring resources. BTIM-specific documents such as mentor responsibility contract listed the mentor tasks but did not go into detail about how these roles were to be enacted. Similar to Achinstein and Athanases (2006a) there appeared, at least within some collaboratives to be an assumption that the mentors would know what to do without mentoring standards and/or mentor training.

From the mentee's perspective, it seemed that the mentor was a buddy, resource person—someone to get help and re-assurance from and not necessarily someone with whom they could have confidential yet critical conversations, centered on the beginning teacher's teaching capability. Indeed, there did not appear to be any mentee role—designed for them within BTIM. It appeared to be assumed that the mentee would bring whatever issues there were to the relationship. Hence, from my observations of the observations and subsequent post-conferences the mentor-mentee relationship appeared to be lopsided with the mentor-in-the-know and mentee-in-the-cold. This observation appeared to dovetail with the research by Wang and Odell (2002) and the roles that mentors assume in the mentor-mentee relationship are based on the assumptions that both the mentor and mentee bring to the relationship.

Re-examination of Cohen and Moffitt's Policy Framework

As part of methodology in Chapter 3 (See Figure 1) there were some assumptions that I had made based on Cohen and Moffitt's (2009) policy implementation framework and the reading of mentoring literature, using policy aims, instruments, capability/capacity and environment. I will re-examine these assumptions and describe through the use of a diagram (See Figure 3) what I had witnessed in practice. Indeed, I discovered that my original understanding of how the policy elements work together was rather rudimentary: What I witnessed in practice and heard during the interviews and focus groups was much more complex with some hidden and/or under-emphasized components. First, I will discuss what seemed to be the policy-aims-in-practice, noting that what was said in interviews appeared to be downplayed in practice. Second, I will look at the environments of consequence within the mentor-mentee relationship. Here it seemed that the collaborative environment was vital since it was in this context that mentors learned their mentoring roles. In addition, the high stakes environments appeared to bathe the entire policy implementation schemata—from the mentoring outcomes or aims to its (possible) effects on what the mentor needs to know and do within the school environment (i.e., the district curriculum). Third, the mentors' and mentees' capabilities and dispositions seemed to have played an important role on their mentoring roles; in particular, the mentee's disposition seemed to compensate for the lack of mentee role definition within BTIM policy. Finally, the policy instruments appeared to have been spread through-out the differing contexts in which mentoring standards would be encompassed more or less within the initial mentor training and support.

Policy-Aims-in-Practice: Build the Mentor-Mentee Relationship

First, in practice the BTIM policy focus appeared superficially to be two-fold: increase beginning teacher retention and build the mentor's capability to mentor. However, the first goal did not seem to be attainable from a mentoring program at least in the eyes of the mentees; there were other more compelling reasons for them to leave education that apparently had nothing to do with mentoring. Indeed, some of the mentees did not see themselves staying in teaching for the long haul despite having a respected and caring mentor who was bringing resources to her mentees, and sharing information across the middle schools in the district. Consequently, I began to question: Can retention be a realistic policy goal for beginning teachers within a mentoring program? In other words, is goal achievable on its own? Retention may be more related to the school environment where the mentee teaches; although the environment may be reflected in the type of mentor selected for working with the mentee, on its own it may not be able to overcome some of the resources (or lack of) in the environment to have an impact on teacher attrition. Perhaps as Cohen and Moffitt (2009) describe retention is too ambitious and ambiguous goal especially since retention may have other mediating factors regulating it. That being said, perhaps mentoring could be a means to retain the experienced teacher as part of a career ladder advancement. For instance, giving experienced teachers more responsibility and pay within the mentoring program may help to retain these teachers in the classroom.

The second goal, building the mentor capability was inherent not only in how TRC funded BTIM but also in the apparent effort to see that mentors were trained

according to a “research-based” mentoring program with subsequent mentoring support. That being said, the mentor training was spotty so it did not in essence seem to be a goal that was supported in practice. Many mentors appeared to feel that they were on their own to learn about mentoring. Only one collaborative appeared to have regular monthly mentor meetings, focused on mentor development.

The other policy goals seen in the literature, especially in evaluative mentoring studies—to build instructional practice and increase student achievement—did not seem to have been reinforced within the mentor-mentee relationship. Rather mentors appeared to spend much time and energy on building mentor-mentee relationships. Hence, observations of the mentee appeared to be downplayed or seemed to be directionless in terms of building the mentee instructional practice since there did not appear to be any teaching goal especially one driven by any standards-driven tool.

In Figure 3 to reflect these ideas, I put dotted lines around all the goals except “build the mentor-mentee” relationship since, although they were all mentioned in the interviews, they did not appear to be the aims-in-practice. I chose dotted lines since all these other policy aims existed in theory but they did not truly exist in practice much like how lines are used in mathematical drawings: dotted signifying something that is there but not seen by the eye.

Environments-of-Consequence

Two environments appeared to be of importance within the mentor-mentee relationship-the collaborative and the high stakes testing environment. First, although the school was where the mentors and mentees met and perhaps worked, in practice other

teachers and school and district officials appeared to be purposefully excluded from BTIM due to issues of confidentiality, trust and the pragmatics of bringing policy to practice. Indeed, TRC took over the administration of BTIM for mathematics and science teachers because school districts were not asking for this funding for supporting and retaining a few teachers in their school district; hence, the support and monies were not being used. TRC stepped and took over this function.

The Collaborative environment was significant since the project directors and/or BTIM officials administered the initial and continual mentor training. Mentor role definitions appeared to emanate, at least partially from the mentor training and common mentoring book. The second environment was hidden: The high stakes testing environment. For practicing mentor teachers they needed to plan their mentoring duties in a way that would not have impacted their own students' achievement on these examinations. Moreover, as the time grew closer to the testing dates, in at least one case some of the mentoring activities especially the observations became compulsory activities. In addition, one mentor in particular during her observations of her mentees was looking for the depth of vocabulary teaching since she had heard the new state standardized exam, STAAR would have a great emphasis on terminology and its usage in novel situations.

In Figure 3, I put the high stakes testing environment around the entire figure since it appeared to bathe the entire mentoring policy system. The district environment although important in terms of the mentor and mentee knowing the district curriculum and policies was not important in terms of other district officials being in the know about

BTIM policy. The collaborative appeared to carry the policy aims and the instruments needed to implement the policy. Consequently, I gave this environment a solid line.

Mentor and Mentee Capabilities and Dispositions: Determiners of Mentoring Roles

The knowledge, skills and disposition (or the capability) of the mentor and mentees were indeed important components of the defining the mentoring roles and the nature of the mentor-mentee relationship. Indeed, these mentor and mentee capabilities were utilized by the participants in to compensate for missing parts of the mentoring policy framework (Cohen & Moffitt, 2009): namely the lack of formal mentoring standards and mentor training. Mentors acknowledged relying on their own teaching and formal mentor training and experiences to compensate for the lack of mentor-standards-in-practice. Mentees had no such support so it appeared that they needed to rely on either their mentor for role definition or their perception of what the role should look like. Moreover, it seemed that mentees needed to rely on their disposition: their ability to ask questions and to be open to mentor suggestions to compensate for the lack of mentee role definition within BTIM policy.

In Figure 3 I did not change the diagram from Figure 1 since the mentors' and mentees' capabilities seemed to have such an influence on mentoring roles.

Mentoring Standards: The Non-Existent Policy Tool

Finally, the mentoring standards did not exist in the minds of the mentors and mentees primarily since there was no formal list delineating the mentoring roles. That being said, the "research-based" mentor training materials did with varying levels of specificity define at least the mentor's role. Consequently, the mentor standards were in

essence embodied completely within the mentor training. Some of the mentors in one collaborative, in particular that had professional learning community-like monthly mentor meetings, credited their BTIM official with helping to identify their roles. This did not seem to be the situation with many of the mentees who had no formal orientation to BTIM. Moreover, the other policy instruments appeared to be at various levels within the environment: mentor stipend is at the TRC level; mentoring log, mentor training and mentor commitment contract seem to belong to the collaborative context.

Indeed, what appeared to be missing from the enactment of BTIM was an infrastructure in which mentoring standards were an integral part and other policy instruments to support them. The missing parts of this framework, similar to Cohen and Moffitt's (2009) policy implementation framework was a set of comprehensive policy tools which brought the policy to practice; without this formal infrastructure the mentors and mentees needed to compensate for these missing elements by relying on their (a priori) capabilities and dispositions. Indeed, the policy tools found within this study including the mentoring standards were either missing or incomplete. However, mentoring policy is just one part of a larger framework in which teacher knowledge and skills as well as a common language and vocabulary form the overarching infrastructure that describes the professional knowledge of being a teacher (See Figure 2).

Policy Recommendations: Proposed Mentoring Infrastructure – Taping the Missing Pieces Together

As mentioned earlier, mentoring standards like any policy instrument cannot stand alone but work in tandem with other policy instruments such as mentor training and

materials, and the accountability system; it also works in conjunction with the other policy elements identified within Cohen and Moffitt's (2009) policy framework; namely the policy aims, capability and environment. But mentoring policy should be part of a larger eco-system of teacher professionalism, which is based on common professional knowledge and skill, and common language and vocabulary. However, as noted by Cohen and Moffitt (2009) these missing elements within a policy infrastructure need to be compensated by the implementer's capability (See Figure 2). Indeed, from my study there appeared to be many missing or incomplete parts of BTIM policy infrastructure: Mentoring standards, accountability system, and mentee induction; at times there appeared to be a misalignment of these elements such as (policy) aims to the mentor's and mentee's roles. These missing elements were not only reflected in the roles played by the mentor and mentee but in how the mentors and mentees interpreted their relationship.

Due to the lack of mentoring standards-in-practice, I have comprised a list of some policy recommendations. Above all, mentoring roles not only need to be formally defined outside of just mentor training materials, but they must be tied firmly tied to the policy aims. Indeed, differing policy aims imply different mentoring roles. Mentoring policy cannot be lopsided in which policy tools target only one side of the mentor-mentee relationship. Finally, mentoring standards—what the mentor and mentee need to know and be able to do within the mentor-mentee relationship—need to be thought of as a being part of a bigger infrastructure that supports all teachers in which mentoring is a subset.

Mentor Policy Needs a Bi-Focal Target: Mentor and Mentee

Mentoring policy needs a bi-focal target. BTIM policy primarily targeted mentors through policy instruments of initial and continual mentor training and support, and mentor stipends. However, if the goal is to improve beginning teacher competence in teaching, mentees will need to have some direction in the form of mentoring standards which define their roles within the mentor-mentee relationship. Moreover, mentor training will need to be constructed to build the mentor's capability to support mentee's roles. For example, the mentor may need to have additional training on how to conduct observations, using a common observational tool. The challenge however will be how the mentor balances the roles of supporter and assessor. Even in the mentoring literature this challenge does not seem to have been adequately addressed: it is just assumed that like oil and water these two roles cannot co-exist. Although some researchers have noted that in some programs when these roles were combined the mentor had greater "professional accountability", especially if the mentor used a standardized-based formative assessment tools (See Carver & Feiman-Nemser, 2009).

Mentor's roles need to be formally defined. There was no formal "list" of mentor roles. To compensate, mentors needed to rely on their teaching and other formal mentoring experiences and in some cases, their monthly mentor meetings to feel in the gaps for their mentor roles. Interestingly, the mentor tended to play roles which paralleled the over-riding theme within these "research-based" mentor training guides: Build the mentor-mentee relationship. However, within these guides there appeared another theme: Build the mentee capability to teach through "coaching" which appeared to be overrun by

the focus on mentor being the emotional supporter, advocate and content support person. Indeed, there was a strong ethos among the mentors: they were not evaluators. If the mentoring goal is to improve instruction with the ultimate goal of improving student achievement, careful thought needs to be put into examining this dominant belief if the mentor is to be seen as a "coach" as well as supporter. Moreover, mentor's knowledge may need to be bi-focal in nature as well, understanding what the mentee needs as an adult learner and teacher, and knowing what the mentee's students need to learn (Achinstein, B., & Athanases 2006a, 2006b)

From my observations of the observation cycle (i.e. conducting observation and subsequent post-conference), there appeared to be no direction or guidance for the observations. Mentors came and observe then had a conversation with their mentee. In most cases, there was no formal observation tool for fear of changing the nature of the mentor-mentee relationship. If a tool was used, it was not tied to any professional teaching standards nor any performance standards. More importantly, perhaps is that mentors were not trained to observe other teachers; they relied on their own experience with being observed with the PDAS or other administrative training/ mentor training. They seemed to serve two goals: Get the mentee ready for the administrative walk-through and to ensure that content topics were covered (e.g. more in-depth coverage of mathematics vocabulary). The downplaying of the observations was felt not only in practice, but also was reflected in the "research-based" mentor training materials. Indeed, there appeared to be a duel between the mentor as an evaluator and as a helper with the

latter function overpowering the former within these materials. If the policy goal is only to retain the beginning teacher, a question might be: Why observe?

Mentee's roles need to be (formally) defined. From this study it appeared that mentees felt a little left out "in-the-cold" as to what their official roles were within the mentor-mentee relationship. Indeed, since there was no formal role definition, the mentee needed to rely on either their mentor or their perceptions on what mentoring should look like to flesh out these roles. The lack of role definition appeared to make the mentor-mentee relationship to have a more "go with the flow" nature in which mentees brought their issues to the mentor who in turn would attempt to resolve them. From my observations and interviews the nature of the relationship appeared to be depended on two things: The capability and the disposition of the mentor and the mentee. Above all, the mentees must be informed formally about these designated mentoring roles. This could include learning roles through mentee induction, and/or mentee handbook.

Mentoring roles, of course would need to be congruent with the policy aim; this leads to the next recommendation.

The Realization That Different Policy Aims Mean Different Mentor and Mentee Role(s)

There needs to be an open discussion with what the mentoring program is designed to do. From my document analysis, and interviews with mentors and mentees, there were a plethora of policy aims: Some were explicit (e.g., retention); others were implicit (e.g., build the mentor capability through mentor training). The dominant policy aim, however, within BTIM, across all oversight and implementation levels, appeared to

be improving the retention rate of beginning teachers (See Table 2). If retention is the ultimate goal, then as discussed earlier mentors may only need training on how to play supportive roles. However, from this study it seemed mentees may have other compelling reasons not to continue teaching which lie outside of the realm of a mentoring program. In addition, with these types of roles, mentor selection and not mentor training may need to be highlighted in policy since mentors may need to only use their own knowledge, experience and expertise, and disposition (e.g., willingness to work with a beginning teacher) to reach this goal. If however, the goal is to build the mentee capability as a professional educator, then the mentoring roles not only need to reflect this change but so does the mentor training, resources and tools.

All Mentoring Policy Tools Need to Be Aligned to Policy Aims and Linked to Practice

As stated earlier policy tools for mentoring need to be congruent, supporting the same policy aim (Cohen & Moffitt, 2009). However, as noted by Cohen (1995) "coherence in policy is not the same thing as coherence in practice" (p.16). In other words, even if there are standards and mentor training aligned to a similar policy aim, they must be linked in some manner to practice (Cohen, 1995). But this tends to be the weak link between instructional guidance for mentors and mentees and their mentoring practice (See Cohen, 1995; Cohen & Hill, 2001). From this study, the professional learning community (PLC) method of learning to mentor as adopted by the Big Bear Collaborative appeared to offer some help in clarifying mentor roles. The premise of continual learning of mentors also appeared to be supported by Feiman-Nemser (2001b)

in her study of an exemplar mentor, Peter Frazer who participated in a PLC as he mentored.

In a similar fashion, the mentees appeared to need some sort of formal introduction to mentoring. Mentees need to know the aims of the program, the mentoring activities, their roles and the roles of their mentor. Similar to Kauffman et al. (2002), the mentees seemed to be a little "lost at sea" in terms of what was expected of them. It seemed without formal introduction some mentees took the mentoring as an informal go-with the flow type relationship.

Mentor Policy Needs an Accountability System

Under BTIM there appeared to be almost no accountability system; this seemed to have created a domino effect: No formal mentoring standards, no formal mentor training and support and no formal mentee induction. Consequently, the quality of the mentor-mentee relationship appeared to depend on mentor's and mentee's capability and disposition. One possible accountability measure could be tying the mentoring program to state teacher certification which is being required in several states. Another would be to demand that mentors and mentees attend the same professional development to help develop instructional and mentor-mentee effectiveness (i.e., meeting the goals of the mentoring program).

Conclusion

First, it appears that mentor standards, especially in regard to what the mentee needs to know and be able to do, must be consciously designed and formalized. Second, all policy instruments must not only be consistent with the policy aims but also in

practice. Third, there seems to be a need to have a mentor accountability system; if mentor training is the primary place to learn the mentoring roles, there must be a mechanism to ensure that training and support transpires, outside of trusting the implementers. Finally, it seems that BTIM needs to be seen from two perspectives: As a policy system and as an instructional system for both the mentors and mentees; this would imply stepping away from being a mentor-centric policy to being one that is bi-focal in nature (See Cohen, 1995). Indeed, it seems from this study that the mentor-mentee relationship would still need to be formally conceptualized within policy.

Policy System or Top-Down Perspective

From the policy system perspective, policy makers need to ensure that the elements as described by Cohen and Moffitt (2009) are consistent and congruent across the system; the environments and implementers must also have the resources and capability to meet the policy aims without imposing so much structure that the implementers do not have the flexibility to adapt the policy to their contexts (See McLaughlin, 1987). Mentoring standards should be seen as a piece of a bigger puzzle of how to meet competing mentoring policy aims. In other words, there appears to be a need to build a mentoring infrastructure in which policy goals are consistent within all policy instruments. Moreover, these policy tools need to compensate for the varying levels of mentor's and mentee's capabilities. For instance, one policy instrument may be salient for one mentor but not for another; however, there are other policy instruments which compensate for this difference. Finally, there needs to be an accountability system for meeting these policy goals and ensuring that there are resources in the environment to

support these aims. Otherwise, as noted by Cohen and Moffitt (2009) mentors and mentees will need to develop these missing elements on their own and if the policy aims are too ambitious, practice may not deviate much from the normative behavior.

Above all, this infrastructure does not need to be made from scratch. NTC (2011) have created an induction program standards guide. Similar to Cohen and Moffitt's (2009) policy implementation framework there appears to be a need for an even greater infrastructure that includes all teachers (See Figure 2). This infrastructure would contain two central components: Common professional knowledge and skill; and common language and vocabulary. Common professional knowledge and skill would encompass professional teaching standards (which NTC (2011) calls "instructional standards") and professional teaching performance standards and tools. In the mentoring world there needs to be a common language and vocabulary where terminology such as mentoring, tutoring and coaching are clarified (See Irby, 2012). Under these two overarching themes would be the common mentor framework. From my study, these four items appeared to be missing, under-developed or not linked together in a cohesive fashion: policy aims, accountability system, mentee induction, mentoring standards, and mentor training and resources. States such as California and Connecticut appeared to have created such encompassing professional framework for all their teachers—experienced and beginning (Carver & Feiman-Nemser, 2009) which form the backbone for their mentoring policy.

Instructional System or Bottom-Up Perspective

From the instructional system perspective or bottom-up perspective, policy-makers would need to understand that popular solutions to beginning teacher attrition and

lack of instructional expertise such as creating a mentoring program may in and of itself be a weak policy instrument if its structure is based solely on the assumptions and capability that mentors and mentees carry to the mentor-mentee relationship. Similar to Spillane (2004), mentoring policy should begin with identifying the assumptions or beliefs the mentors and mentees bring to the policy to better understand what needs to be done to meet the desired policy aim(s). In other words, policy makers need to understand the mentor's and mentee's "internal texts". Fortunately, researchers such as Wang and Odell (2002) have identified some of the most common prevailing assumptions, gleaned from other mentoring studies. Indeed, it seems that the dominant role expectation that mentors and mentees bring is that the mentor will support the mentee psychologically and emotionally. It becomes apparent that if there is a mismatch between the mentor and mentee's assumptions about their roles and what policy demands, that without mentoring standards, training and support the desired policy outcome might not be realized.

From this study it appears that mentoring standards—what the mentor and mentee need to know and be able to do in the mentor-mentee relationship—needs to be formalized, and aligned with policy aims and the other policy instruments. Without firm definitions, it seems that mentors and mentees relied on their capabilities and dispositions for role definitions. If the ultimate goal is to retain the beginning teacher, there might not be a need to formalize mentoring roles in the form of mentoring standards; however, if the goal is to increase teacher capability a more concerted effort must be made to align these goals with the mentoring standards, mentor training and materials. Just as important is that the mentees need to be informed formally of these aims and roles. It appeared

without formal standards and accompanying tools, the mentee seemed to view the mentor-mentee relationship as an informal, go-with-the-flow relationship. Mentors, by and large, appeared to view their primary goal was to build their relationship with their mentees; their roles reflected this goal.

Mentors in a sense would need to be equipped to be "reflective practitioners" in which they use their knowledge, expertise and experience in unique situations to solve the problems at hand (Schon, 1983). The mentor is similar to a "technician" in that he is "… applying to everyday problems of his organization the principles and methods derived from management science" and similar to a "craftsman" since what he does "… cannot be reduced to explicit rules and theories" (Schon, 1983, pp. 236-237). For the role of "technician" the mentor would need some sort of mentoring standards from which to approach his work, combined with tools and initial training; for the role of "craftsman" the mentor would need some sort of continual mentor development where mentors come with their problems in practice and are allowed to reflect and discuss ways to solve them. From this study, one collaborative held regularly professional learning community mentor meetings which the mentors identified as being important to their development as a mentor. Some of these mentors seemed to feel that it gave them time to problem-solve and learn from other mentors in the field. This training seemed to compensate for these mentors for a lack of a formal list of mentoring roles.

Mentees as well need time to develop reflection skills especially since the great deal of the teaching day teachers are isolated from each other. The ability to think on

one's feet and reflect is an important but in this study it appeared to be under-developed since observations appeared to be downplayed by the mentors.

Conceptualization of Mentoring within BTIM

Finally, there still appears to be a need for a conceptualization of mentoring—what it is, what it looks like in practice, what are the outcomes, and what are the tools used to reach policy outcomes. From this study, it seems that mentors and mentees appeared to adopt roles more or less consistent with the "research-based" mentor training even without the training. Although I found the word "coach" in both the "research-based" training manuals this term, not only was not adequately defined but appeared to be assumed to be something that mentors already had the capability to perform. The lack of mentoring-standards-in-practice gave the mentor-mentee relationship a Wild West feel since there was: No sheriff or no accountability for mentoring; no law—no standards in practice align to training and professional development; lots of uncharted territory—so no overriding mentoring infrastructure. Consequently, the mentor had full rein as to what she did since there were none or limited set of parameters (accountability measures). But in the same breath, the researcher must realize that even if there were mentoring standards aligned to a "research-based" mentoring, standards will always be incomplete (See Shulman, 1987; Kumashiro, 2009) and should also be challenged (Kumashiro, 2009).

Limitations of Study

There were at least three types of limitations of this study: Data and methodological limitations, and researcher biases. All have the potential to shape and color the interpretation of the data obtained from this study. First, I had assumed at the

beginning of the research, that there would be some common mentor guidebook that would have described the mentoring knowledge and roles. None existed save for a common mentoring book; this text was more of a resource book than one that documented the "standards" with subsequent supporting materials. Indeed, I was acutely aware that when I said "mentoring standards" I was coining a new term for the mentors and mentees. Hence, I needed to clarify the meaning immediately. Indeed, Texas has had a long history of K-12 standards, tied to curriculum and state-wide assessments well before the enactment of No Child Left Behind of 2001. By choosing this term, I may have inadvertently influenced the mentor and mentee responses to the existence of mentoring standards. Second, I did not (and could not) examine how mentoring standards were learned through the "research-based" mentor training. Consequently, I needed to rely on my document analysis of these mentor training resources and the viewpoints of the mentors and mentees to tell this story.

Third, this is a qualitative study. Hence, by nature I cannot make broad generalizations about mentoring standards. However, I can describe how the enactment or non-enactment of these standards shaped or not shaped the mentor-mentee relationship in seven high poverty schools in central and southern Texas. Fifth, this study only examined in-depth mentoring standards—what the mentor and mentee need to be able to know and do within the mentor-mentee relationship. Although I discussed other policy instruments such as mentor training, I did not look at these in-depth to see how they may have impacted the mentor-mentee relationship since they were not the focus of this study.

Above all, as a former teacher, student teacher facilitator and education policy graduate student, I acknowledge that my viewpoint skews the interpretation of this data. Indeed, as I was coding and writing my findings I found myself being hampered by all the different perspectives concerning mentoring standards; there was just not one clear and clean story but a multitude.

Future Study

From this research, there are several different directions in which one could examine mentoring and/or induction policies, in regard to mentoring standards and other policy instruments. The following is an abbreviated list of possible research studies.

Examination of State Policies That Tie Certification to Induction-Mentoring Programs

Mentoring standards are just one policy instrument used to bring policy to practice. Another is the tie between mentoring and induction policies at the district and/or state level and state teacher certification. In particular, I would like to examine how the mandatoriness of these policies impact the mentor-mentee relationship and compare it with states that do not have this tie with state teacher licensure. Most importantly, I would like to examine in-depth what occurs when mentors are put into the evaluation role: Does this always change the dynamics of the mentor-mentee role? If so, in what ways? I would like to test the premise (Yusko & Feiman-Nemser, 2009) that a mentor can be both a support and evaluator: How are issues of trust and confidentiality mitigated?

Ethnographic Study of Mentor-Mentee Pair over Several Years

From my dissertation study, most of the mentors and mentees were into their second year of mentorship. I would like to know if the demands, (formal and informal) roles of the mentor and mentee change over this period. In particular, which role(s) appear to be the most significant in the eyes of the mentor and mentee? At what stage do these change? How do mentoring standards shape these changes? Moreover, do these mentoring phases change despite the type of mentoring received (e.g., mandated state program tied to certification versus voluntary state program).

Examination of the Intersection of District and Statewide Mentoring Programs

All of the beginning teachers from this study also participated in a district-wide mentoring and/or induction program. In some cases, the mentee had several mentors under several different programs. I would like to pose the following research questions: Does there need to be coherence in policy aims and instruments among the differing mentoring program? How does the mentee feel about having different mentors? Does the lack of coherence affect the quality of the mentor-mentee relationship in the differing mentoring programs?

APPENDICES

Appendix A: Interview Protocols for Mentors

Interview #1—Introductory Interview

1) *Tell me about yourself.*
    a. How long have you been a teacher? Subjects? Grades?
    b. How long have you been in this school?
    c. What are your roles in this school?
2) *Tell me about your experiences as a mentor.*
    a. What have been some of your challenges? Successes?
    b. In what contexts have you mentored?
    c. What specific challenges are there for a beginning mathematics and science teachers in a middle school context?
3) *What are your expectations about mentoring?*
    a. What do you see are the goals of mentoring? (Aims)
    b. How do you see your role?
    c. What do you see as your school's role for creating a successful mentoring program? (Environment)
    d. What skills or knowledge do you think you will need to be a "good" mentor? (Capacity)
    e. What do you see as the outcomes of a successful mentoring session? Program?
4) *What guides you as plan to perform the (mentoring) role? (Instruments)*
    a. Are there any frameworks or standards that help you in your role as a mentor? (e.g., frameworks that define your role/ the role of the mentoring program given to you during your mentor training; national/state math/science standards)
    b. If so, what are they?
    c. In what ways have they been helpful? A hindrance?

Interview #2—End of Year

1) *How have your expectations for mentoring matched your experiences? (Aims)*

2) *What were the challenges that you did not anticipate? Successes?*

    a. How did you handle these? (What would you do differently next year)?

    b. In what ways did the school environment help you to mentor? (e.g., principal support; time to mentor/observe mentee) (Environment)

3) *What did you receive from the mentoring experience? (Capacity)*

4) *What did you use to guide you as you mentored? (Instruments)*

    a. Did these change as the year went by? If so, in what ways did they change?

Appendix B: Interview Protocols for Mentees

Interview #1—Introductory Interview

1) *Tell me about yourself.*

    a. How long have you been a teacher at this school? Subjects? Grades?

    b. What type of teacher training did you receive before you began this job?

2) *Tell me about your experiences as a teacher at this school.*

    a. What types of assistance did you receive from the school or district to help you as a teacher? (e.g., have you been assigned a mentor? Had a mentor in the past at this school?) (Capacity)

    b. In what ways was this assistance beneficial? Not beneficial?

    c. What specific challenges do you see for yourself as a beginning mathematics (or science) teacher? At this school? In this district? (Environment)

3) *What do you expect to receive from being mentored? Give to the mentoring relationship? (Aims)*

    a. How do you see your role in the mentoring relationship?

    b. How do you see the role of your mentor? Principal?

    c. How do you see the role of the school/district in the mentoring relationship?

    d. Have you observed positive outcomes of a successful mentoring? Negative experiences?

4) *What is helping you as you learn to teach at this school? Within this school district? (Instruments)*

    a. Are there any frameworks or standards that help you?

    b. If so, what are they?

    c. In what ways have they been helpful? A hindrance?

Interview #2—End of Year

1) *How have your expectations for mentoring matched your experiences? (Aims)*

2) *Tell me about your experiences as a math/ science teacher at this school.*

    a. In what ways did mentoring help you as a math/ science teacher? (Capacity)

    b. In what ways was this assistance beneficial? Not beneficial?

    c. What specific challenges do you encounter as a beginning mathematics (or science) teacher? At this school? In this district? (Environment)

3) *What helped you as you learn to teach at this school? Within this school district? (Instruments)*

    a. Are there any frameworks or standards that helped you?

    b. If so, what are they?

    c. In what ways have they been helpful? A hindrance?

Appendix C: Interview Protocols for Principals

Interview #1—Introductory Interview

1) *Tell me about yourself.*
    a. How long have you been a principal?
    b. How long have you been in this school?
    c. What do you see as your roles in this school?
2) *Tell me about the mentoring program(s) at this school.*
    a. How long has there been a program?
    b. Which criteria were used to decide to use this program?
    c. What specific challenges are there for a beginning mathematics and science teacher in a middle school context? At this school? (Environment)
3) *Tell me about the experiences with mentoring program as a principal.*

a. What have been some of the challenges? Successes?

4) *What are your expectations about mentoring?*
    a. How do you see your role?
    b. What do you see as the outcomes of a successful mentoring program? How do you measure these? (Aims)
    c. What skills or knowledge do you think you will need to be a "good" mentor supporter? (Capacity)
5) *What guides you as you provide support to mentors? (Instruments)*
    a. Are there any frameworks or standards that help you in your role as a mentor supporter? (e.g., mentoring standards; content area standards)
    b. If so, what are they?
    c. In what ways have they been helpful? A hindrance?

Interview #2—End of Year

1) *How have your expectations for mentoring matched your experiences?*

    a. Were your personal goals mentoring met? Professional goals? (Aims)

    b. What measures did you use to determine that these goals were met?

2) *What were the challenges that you did not anticipate? Successes?*

    a. How did you handle these? (What would you do differently next year)?

    b. In what ways did the school environment help you to support the mentoring program? (Environment)

3) *What benefits did you receive for having mentoring programs at your school? (Capacity)*

4) *What did you use to guide you as supported the mentors? (Instruments)*

    a. Did these change as the year went by? If so, in what ways did they change?

Appendix D: Focus Group Interviews—Mentors

Focus Group Interview #1

1) *Tell me about the training you received on mentoring.*

    a. What professional development did you receive to help you mentor? From whom? Where? (Instruments/Capacity)

    b. What materials were you given? How do you anticipate you will use them? (Instruments/Capacity)

2) *What do you anticipate as challenges for being a mentor at your school? District? (Environment)*

3) *What do you think will help you navigate these (anticipated) challenges? (Instruments)*

    a. For example, what tools do you think you will use to help you mentor?

4) *What personal and professional goals do you have for the mentoring process? (Aims)*

5) *Describe the mentoring relationship.*

    a. What does "good" mentoring look like to you?

    b. What do you see as your role in the mentoring process?

    c. What do you see as the role of your mentor (e.g., what do you expect to get from her)?

Focus Group Interview #2

1) *How did the training you received (from TRC/district/school) help you to mentor? (Capacity)*

2) *Please give me any examples of where your training helped (or didn't help) to mentor.*

3) *What were your challenges as a mentor at your school? (Environment)*

    a. What helped you to navigate these challenges? (Instruments)

4) *Did you meet your personal and professional goals for mentoring? If so, what did you do? (Aims)*

5) *After a year of being a mentor, how has your definition of "good" mentoring changed*?

    a. Do you see any difference in your role as mentor? If so, in what ways?

    b. Do you see any difference in the role of the mentee? If so, in what ways?

    c. Do you see any difference in the role of the school? District? If so, in what ways?

    d. What caused these changes in your thinking?

    e. How did standards help/not help in this change?

Appendix E: Focus Group Interviews—Mentees

Focus Group Interview #1

1) *Tell me about the support you received as a beginning teacher.*

    a. What professional development did you receive? From whom? Where? (Capacity)

    b. What types of induction activities did you participate in (e.g., introduction to school policies; mentoring activities)? (Capacity)

    c. What materials were you given? How do you anticipate you will use them? (Instruments)

    d. How do you anticipate using this information or materials from the induction or professional development that you received? (Capacity)

2) *What do you anticipate as challenges for being a beginning math/science teacher? At your school? In your district? (Environment)*

3) *What do you think will help you navigate these (anticipated) challenges? (Instruments)*

4) *What personal and professional goals do you have for mentoring program? (Aims)*

5) *Describe how you see the mentoring relationship.*

    a. What do you see as your role in the mentoring process?

    b. What do you see as the role of your mentor (e.g., what do you expect to get from her)?

    c. What do you see as the role of the school/district in the mentoring process?

    d. What helps you in defining these roles?

Focus Group Interview #2

1) *Tell me about how the training you received helped you to teach math/ science at your schools.*

    a. What professional development did you receive? From whom? Where? (Capacity)

    b. What types of induction activities did you participate in (e.g., introduction to school policies; mentoring activities)? (Capacity)

    c. What materials were you given? How do you anticipate you will use them? (Instruments)

    d. How do you anticipate using this information or materials from the induction or professional development that you received?

2) *What were your challenges as a mentee? Beginning teacher at your school? (Environment)*

    a. What do you think will help you navigate these challenges in the future?

3) *Did you meet your personal and professional goals for mentoring? If so, what did you do?*

4) *After a year of being mentored, how has your definition of "good" mentoring changed?*

    a. Do you see any difference in your role as mentee? If so, in what ways?

    b. Do you see any difference in the role of the mentor? If so, in what ways?

    c. Do you see any difference in the role of the school? District? If so, in what ways?

    d. What caused these changes in your thinking?

    e. How did standards help/not help in this change?

Appendix F: TRC Officials Interview

1) *Please give me some of the background and history behind BTIM.*

    a. How did TRC become the administrators of this policy?

    b. Please explain the "train the trainer" model that is used by TRC in implementing BTIM.

    c. How does BTIM get funded? How does the money get distributed (e.g., to mentors; to the collaboratives)? (Instruments)

    d. What have been some of the successes and challenges in implementing this policy?

    e. What do you see as the future for BTIM (e.g., continuation or not)?

2) *Let's discuss in more detail the outcomes of this policy*.

    a. What are the possible outcomes of BTIM? How are these measured? (Aims)

    b. How do you think the school, district and collaborative context influence these outcomes? (Environment)

    c. Under BTIM some collaboratives have monthly meetings with their mentors and still other collaboratives have mentor "training" in the form of professional development. How do you think these different forms of mentor training might influence BTIM outcomes? (Capacity)

    d. Do you think high stakes testing such as STAAR will affect these outcomes? If so, how? (Effects of other policies/environment)

    e. Do you think that funding of this program (e.g., mentor's stipend) will influence these outcomes? If so, how? (Instruments)

3) *I would like to discuss some of the expectations that there are for the implementers (e.g., mentors, mentees, principals) of this policy.*

    a. What are the expectations for the project director/ BTIM official? In other words, what is the project director/ BTIM official supposed to know and do during the implementation of BTIM? (Aims)

    b. What are the expectations for the mentor? Mentee? Principal? In other words, what are they supposed to know and do? (Aims)

c. How do the implementers of this policy learn about these expectations? (Instruments)

d. What types of training do the mentors and project directors/BTIM officials receive from TRC? (Capacity)

Appendix G: Project Director & BTIM Official Interview

1) *Tell me about yourself.*

   a. How long have you been a BTIM project director/ BTIM official?

   b. What are your roles as BTIM project director/ BTIM official?

   c. What type or kinds of training did you receive from TRC to prepare for this position? Has this training been beneficial? If so, in what ways? (capacity)

   d. Is there other training that prepared you for this role? If so, what type(s) of training did you receive? (capacity)

   e. How do you use this training in your role as BTIM project director/ BTIM official?

   f. What research-based mentor training program are you using to train the BTIM mentors? (instruments/ capacity)

   g. Are there any standards or guidelines for the mentors and mentees, under this research-based training program for the BTIM program? If so, what are they? (instruments)

2) *Let's discuss in more detail the outcomes of this policy*.

   a. What are the possible outcomes of BTIM? (aims)

   b. How do you think the school and district context influence these outcomes? (environment)

   c. Some mentors have had different training (outside of BTIM), for example they may have participated in the TAP (Teacher Advancement Program, funded by the Milken Foundation) program. How has (or might) this different training play on the outcomes? (capacity/instruments)

   d. Do you think that funding of this program (e.g., mentor's stipend) will influence these outcomes? If so, how? (instruments)

   e. Do you think high stakes testing such as STAAR will affect these outcomes? If so, how? (effects of other policies/environment)

   f. What are your expectations (i.e., what is he or she expected to know and do in this role) for the mentor? Mentee? Principal? (aims/environment)

   g. How do the mentors, mentees and principals learn about these expectations? (instruments)

Appendix H: ESC Official Interview

1) *Please give me some of the background and history behind BTIM at this ESC.*

   a. How was it decided that this ESC would participate in BTIM?

   b. What do you see as the aims and goals of BTIM? (Aims)

   c. How does this ESC support BTIM? In the other words, how does this ESC support the aims and goals of BTIM? (Capacity)

   d. What research-based mentor training program is the ESC using to train the BTIM mentors? (Instruments/Capacity)

   e. Are there any standards or guidelines for the mentors and mentees under this research-based training program for the BTIM program? If so, what are they? (Instruments)

2) *Let's discuss in more detail the outcomes of this policy*.

   a. How do you think the school and district context influence these outcomes? (Environment)

   b. Some mentors have had different training (outside of BTIM), for example they may have participated in the TAP (Teacher Advancement Program, funded by the Milken Foundation) program. How has (or might) this different training play on the outcomes? (Capacity/Instruments)

   c. What role do you think that funding of this program (e.g., mentor's stipend) might play on these outcomes? (Instruments)

   d. What are your expectations (i.e., what is he or she expected to know and do in this role) for the mentor? Mentee? Project director? (Aims/Environment)

   e. How do the mentors, mentees and project directors learn about these expectations? (Instruments/Capacity)

Figures

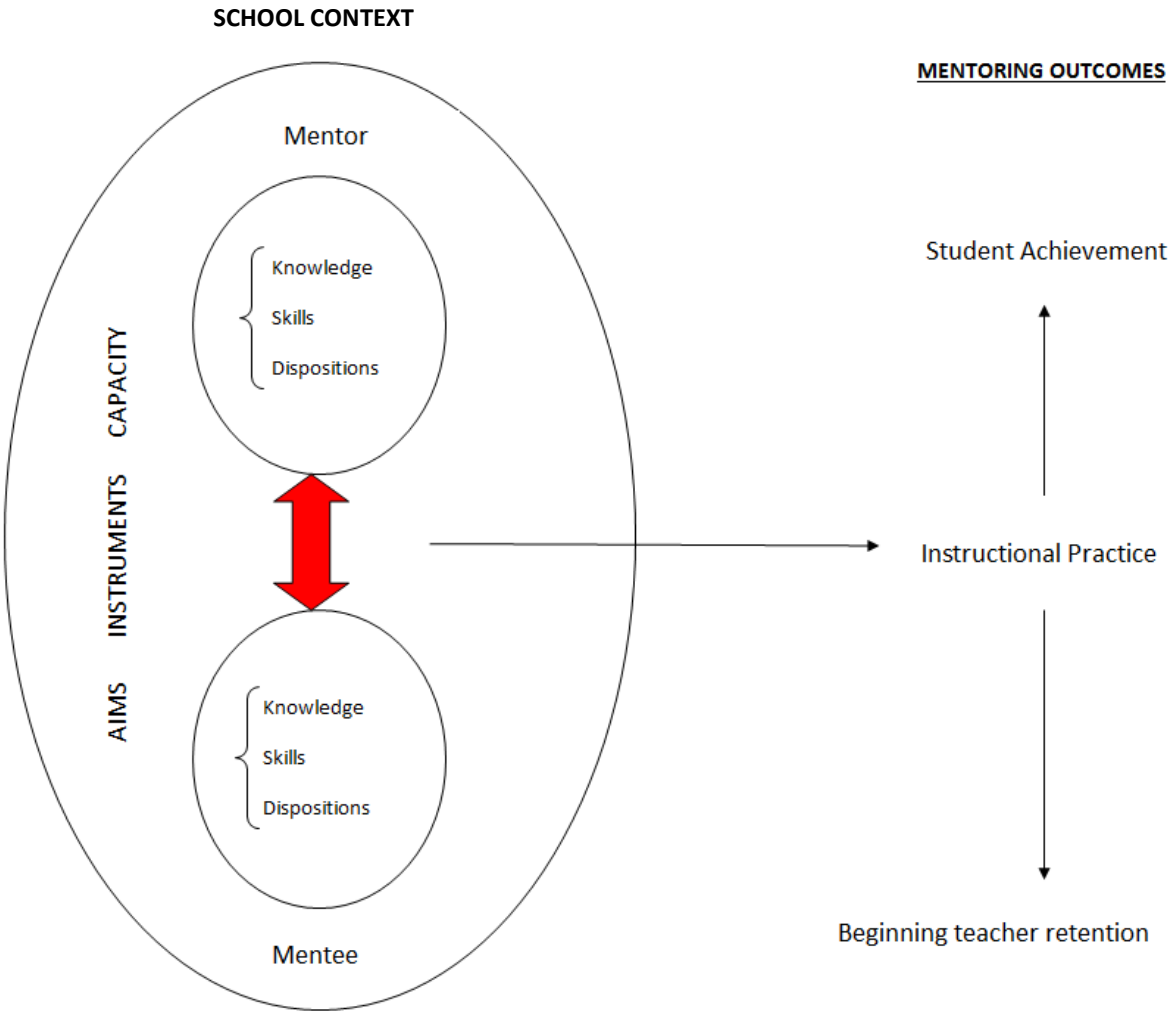

Figure 1. Adapted from Cohen & Moffitt (2009)

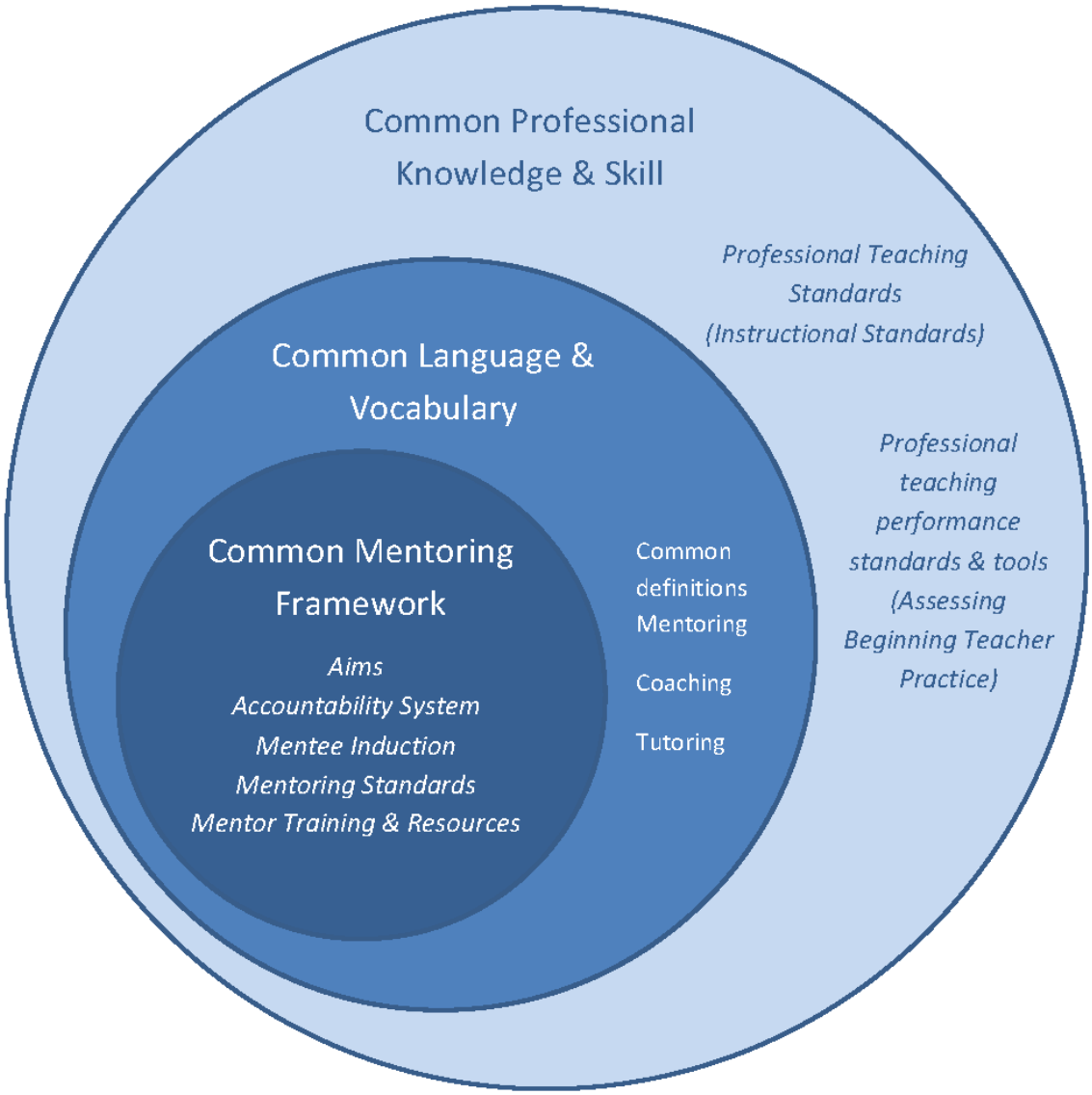

Figure 2. Author's rendering of mentoring infrastructure, adapted from Cohen & Moffitt (2009) and NTC (2011) Induction Program Standards

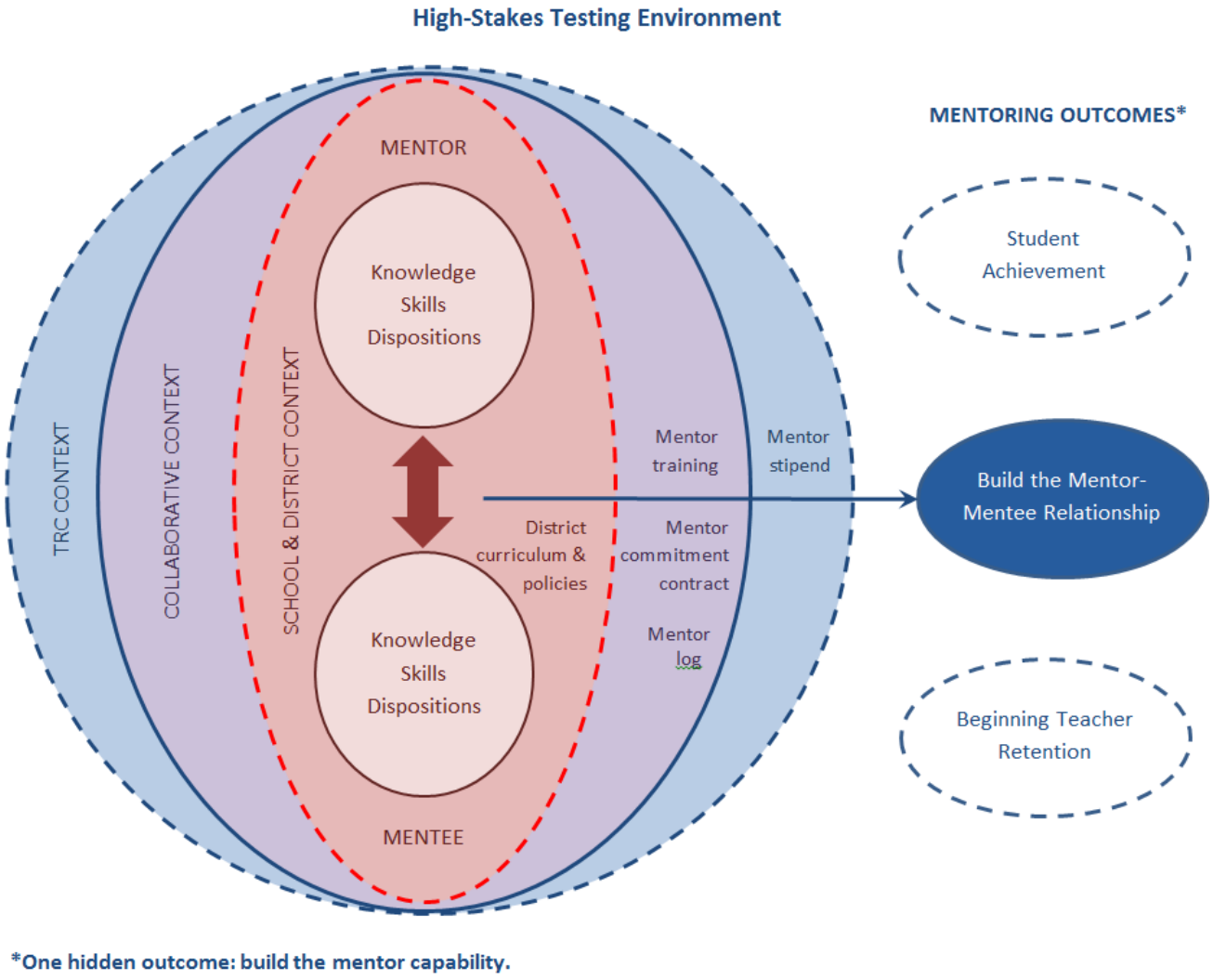

Figure 3. BTIM in practice. Adapted from Cohen & Moffitt's Policy Framework.

Tables

Table 1
Student Demographics by School, 2010-2011

Middle School	School District	Collaborative	Student Demographics
Alvira	Watertown	Appleton	74.3 % Hispanic 12.9% White 8.2% African American 1.7% Asian 0.3% American Indian 0.4% Pacific Islander 2.1% two or more races
Ascot	Watertown	Appleton	74.3% Hispanic 10.9% White 9.0% African American 2.4% Asian 0.3% American Indian 0.1% Pacific Islander 3% two or more races
Abiline	Watertown	Appleton	91.4% Hispanic 4.1% White 3.1% African American 0.8% Asian 0.1% Pacific Islander 0.5% Two or more races
Bison	Valley	Big Bear	63.7% Hispanic 27.3% White 5.7% African American 0.4% Asian 0.4% American Indian 0.3% Pacific Islander 2.2% two or more races
Beaver	Valley	Big Bear	85.7% Hispanic 8.5% White 4.4 % African American 0.4% Asian 0.2% American Indian 0.8% two or more races
Clover	Xerxes	Clementine	95.9% Hispanic 3.6% White 0.3% African America 0.2% Asian
Cherrywood	Xerxes	Clementine	98.8% Hispanic 1.2% White

Source: Academic Excellence Indicator System from Texas Education Agency website: http://ritter.tea.state.tx.us/perfreport/aeis/

Table 2
BTIM Policy Environments via Cohen and Moffitt's (2009) Policy Framework

	Oversight Level	Oversight/Implementation Level	Implementation	Level
	Legislative Level	TRC	Collaborative	Mentor/Mentee Level*
Policy Aims	1. Retention 2. Build mentee capability 3. Build mentor capability	1. Retention	1. Retention 2. Build the mentor-mentee relationship 3. Increase student achievement	1. Retention 2. Build confidence of the mentee 3. Build mentor-mentee relationship 4. Increase student achievement 5. "Get better"
Instruments	1. Mentor training 2. Professional development of beginning teacher/ mentor… such as data usage, pedagogy 3. Mentor stipend 4. **Listing of mentor duties/responsibilities**	1."Mentoring Texas" mentor training—supplied if needed to project directors 2. BTIM Grant requirements of each collaborative 3. Mentor stipend 4. Mentor log used for accountability purposes 5. **Listing of mentor duties/responsibilities (within BTIM grant cycle documents)**	1. Mentor initial & continual training 2. **Grant requirements (mentor responsibilities**) through mentor responsibility contract: a. # of observations with or without observational tool b. # of face to face interactions 3. Mentor log 4. Mentor stipend	1. No common observational tools 2. No common conversational protocol 3. Common mentor log, initialed by mentee 4. **Monthly mentor training & support (Big Bear)** 5. Mentor stipend 6. **Common mentoring book**

Table 2, cont.

Capability	1.$15 million to implement program	1. Trust in project director to perform grant requirements: initial & continual mentor training 2. Trust in project directors to choose quality mentors	1. Expectations given from mentor to mentee 2. Trust in mentor's ability to mentor	1. **Past teaching & formal mentor training & experiences** 2. **Mentor self-learning** 3. Expectations given from mentor to mentee
Source	Texas Ed. Code	1. BTIM Grant cycle documentation 2. Interview with TRC official	1. Mentor responsibility contract 2. Interviews with project directors (not Appleton) 3. Observations of mentor trainings (Big Bear & Clementine Collaborative)	1. Observations of mentor conducting observations & mentor-mentee post-conferences 2. Initial & final interviews; post-conference interviews with mentors & mentees

Note: Bolded items indicate where to locate mentor standards---what the mentor and mentee were to know and be able to do within mentor-mentee relationship.

*The school/district not included within the BTIM environment since school and districts were more or less kept out of the implementation of BTIM—only needed to get approval to have mentor program on their campus; Although one could argue that mentor-mentee is not an environment in and of itself, there did appear to be an interpersonal relationship environment between the mentor and mentee.

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